BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of MAUI ELECTRIC COMPANY, LIMITED For Approval of Rate Increases and Revised Rate Schedules.	DOCKET NO. 2006-0387

JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW OF MAUI ELECTRIC COMPANY, LIMITED AND THE CONSUMER ADVOCATE

EXHIBITS 1-2

AND

CERTIFICATE OF SERVICE

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In accordance with the Commission's April 17, 2009 letter, Maui Electric Company, Limited ("MECO") and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate")[1] hereby submit their Joint Proposed Findings of Fact and Conclusions of Law. As the Parties have settled all issues in this proceeding, MECO and the Consumer Advocate have agreed jointly to file their Proposed Findings of Fact and Conclusions of Law.

Also enclosed are: (1) "Exhibit 1," which is identical to Exhibit 1 of the December 7, 2007 Stipulated Settlement Letter; and (2) "Exhibit 2," which is identical to Exhibit 1 of the December 12, 2007 Final Settlement Letter ("Exhibit 2").

[1] MECO and the Consumer Advocate are jointly referred to as the "Parties."

Following is a table of contents which provides the section names and page numbers in the Joint Proposed Findings of Fact and Conclusions of Law.

DATED: Honolulu, Hawaii, July 17, 2009.

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JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Maui Electric Company, Limited ("MECO" or the Company") and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate") respectfully submit these Joint Proposed Findings of Fact and Conclusions of Law.

I.

Introduction

A.

Summary

1. As discussed below, there were no issues remaining between the Parties impacting revenue requirements or rate design following their settlement agreements filed on December 7 and 12, 2007.

2. Although not an issue between the Parties, legislation required the Commission to consider whether there should be a sharing of risk associated with changes in the price of oil that is reflected in the existing Energy Cost Adjustment ("ECA") Clause ("ECAC"). Given the Energy Agreement[2] between the State of Hawaii and the HECO Companies,[3] which documents a course of action to make Hawaii energy independent, and recognizes the need to maintain the HECO Companies' financial health while achieving that objective, as well as the overwhelming support in the record for maintaining the ECAC in its current form, the Commission should determine that MECO's ECAC complies with the requirements of Hawaii Revised Statutes ("HRS") § 269-16(g). See Part II.A.1, infra.

3. Thus, MECO respectfully requests that the Commission approve a final general

[2] The October 20, 2008 *Energy Agreement Among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and Hawaiian Electric Companies* is referred to as the "Energy Agreement".

[3] Hawaiian Electric Company, Inc. ("HECO"), Hawaii Electric Light Company, Inc. ("HELCO") and MECO are collectively referred to as the "HECO Companies" or "Companies".

rate increase that will produce a revenue increase of $13,222,000, or 3.7%, over revenues at present rates. See Part II.E, infra.

B.

Procedural Background

4. On February 23, 2007, MECO filed an application for approval of rate increases and revised rate schedules in which MECO requested a general rate increase of approximately $18,977,000, or 5.3%, over revenues at present current effective rates (i.e., revenues that were in effect at the time MECO filed its application). MECO's filing included its Direct Testimonies, Exhibits and Workpapers.[4] MECO filed its Application pursuant to Subchapters 2, 6 and 8 of the Rules of Practice and Procedure Before the Public Utilities Commission (the "Commission's Rules of Practice and Procedure"), Title 6, Chapter 61, of the Hawaii Administrative Rules ("HAR"). MECO seeks Commission approval of the proposed rate increase and revised rate schedules pursuant to Hawaii Revised States ("HRS") § 269-16.

5. MECO served copies of the Application on the Consumer Advocate, an *ex officio* party to this docket, pursuant to HRS § 269-51 and HAR § 6-61-62.

6. By Order No. 23370 ("Order 23370"), filed April 16, 2007, the Commission found that the Application was complete and properly filed under HRS § 269-16(d) and HAR § 6-61-87. Thus, the filing date of MECO's complete Application is February 23, 2007. Order 23370 further directed the parties to submit to the Commission a proposed stipulated procedural order by May 18, 2007.

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[4] See MECO's Application, filed February 23, 2007 in Docket No. 2006-0387 ("Application"). On September 22, 2006, MECO filed a Notice of Intent, pursuant to Hawaii Administrative Rules § 6-61-85, stating that it planned to request rate relief based on a 2007 calendar test period and file an application on or after December 1, 2006. On December 19, 2006, MECO filed a Motion for Approval of Test Period Waiver ("Motion for Waiver") seeking Commission approval to use a calendar 2007 test period in support of its application. By Order No. 23188, filed January 11, 2007, the Commission approved MECO's request to utilize a 2007 calendar test year.

7. On April 23, 2007, the Commission issued Protective Order No. 23379 to govern the classification, acquisition and use of confidential information by any party in this docket.

8. On April 24, 25 and 26, 2007, the Commission held public hearings regarding MECO's Application on the islands of Molokai, Maui, and Lanai, respectively, to gather public comments on this docket.

9. In April, May, July and August 2007, MECO filed updates to certain of its direct testimonies, exhibits and workpapers filed on February 23, 2007 to reflect recorded 2006 results, as well as other revisions and corrections.

10. By Order No. 23449, filed May 21, 2007, the Commission granted the County of Maui's Motion for Enlargement of time to intervene in this docket, filed on May 7, 2007, and ordered that any motion to intervene by the County of Maui would need to be filed by May, 29, 2007.

11. By Order No. 23496 ("Order 23496"), filed June 19, 2007, the Commission approved with modifications a proposed Stipulated Procedural Order, filed by the parties on May 24, 2007, upon a finding that the issuance of a procedural order would aid in the just, speedy and inexpensive determination of this proceeding.

12. During the period from May through October 2007, MECO responded to information requests ("IRs") submitted by the Consumer Advocate.

13. By letter dated August 24, 2007, the Commission approved a request by the Consumer Advocate on behalf of the Parties[5] to extend the deadline for certain procedural steps concerning IRs and direct testimonies in this docket by several weeks.

14. On October 25, 2007, the Consumer Advocate filed its Direct Testimonies,

[5] MECO and the Consumer Advocate are jointly referred to herein as the "Parties".

Exhibits and Workpapers in this docket.

15. By transmittal dated November 2, 2007, MECO submitted IRs to the Consumer Advocate.

16. By letter dated November 19, 2007, MECO informed the Commission that the Parties have reached verbal settlement of all revenue requirement issues in this docket. As a result, MECO requested that the Commission suspend the remaining steps in the procedural schedule specified in Order 23496, as amended, pending the filing of settlement letters executed by MECO and the Consumer Advocate.

17. On November 30, 2007, the Commission granted MECO's request to suspend the remaining steps of the procedural schedule, but excluded from the suspension the deadlines for filing of the Parties' Joint Settlement Letter (December 3, 2007) and MECO's Statement of Probable Entitlement (December 14, 2007).

18. On December 7, 2007, the Commission granted the Parties' December 3, 2007 request for an extension of time to file the Parties' Joint Settlement Letter from December 3, 2007 to December 7, 2007.

C.

<u>MECO's Requests</u>

19. MECO's Application requested approval of a general rate increase and revised rate schedules and rules. The amount of the increase in revenues requested was $18,977,000, or 5.3%, over revenues at present current effective rates (i.e., rates in effect for customers at the time of the Application, including applicable surcharges).

D.

Issues

20. The Parties accepted the 2007 calendar year as the appropriate test year in this rate proceeding based on the requirements of HAR § 6-61-88(3)(B). The issues set forth in the Parties' Stipulated Procedural Order, as amended by Order 23496[6] are as follows:

1. Is MECO's proposed rate increase reasonable?

   a. Are the proposed tariffs, rates, charges and rules just and reasonable?

   b. Are the revenue forecasts for Test Year 2007 at present rates and proposed rates reasonable?

   c. Are the projected operating expenses for Test Year 2007 reasonable?

   d. Is the projected rate base for Test Year 2007 reasonable?

   e. Is the requested rate of return fair?

2. What is the amount of Interim Rate Increase, if any, to which MECO is probably entitled under §269-16(d) of the Hawaii Revised Statutes?

3. Whether MECO's ECAC complies with the requirements of HRS § 269-16(g).

E.

Stipulated Settlement Letter

21. Order 23496, as amended, governs the proceedings in this docket. Pursuant thereto, the Parties engaged in settlement discussions, in an attempt to resolve the issues established for this docket. On December 7, 2007, the Parties filed a Stipulated Settlement Letter ("Stipulated Settlement Letter"), documenting their agreements regarding the matters in this proceeding, and in particular, that the amount of the rate increase to which MECO is probably entitled under HRS § 269-16(d) is $13,222,000, or 3.7%, over revenues at present

[6] Order 23496 amended the Parties' proposed Stipulated Procedural Order by inserting Issue No. 3.

rates.[7] The Parties agreed to address cost of service/rate design issues separately and stated their intent to later submit a document covering these areas which do not affect the revenue requirements. The Parties also agreed to adopt a pension tracking mechanism and a post-retirement benefits other than pensions ("OPEB") tracking mechanism, which are discussed below.

22. With respect to the schedule of proceedings, the Parties agreed, among other things that: (1) their settlement eliminated the need for certain remaining procedural steps; (2) all of the written testimonies (and exhibits, workpapers, updates and responses to IRs related to such testimonies and updates) in this docket could be submitted without the witnesses appearing at an evidentiary hearing; (3) it is not necessary to have an evidentiary hearing in this docket; (4) all identified witnesses are subject to call at the discretion of the Commission; and (5) the Parties waived their rights to present further evidence on the issues and conduct cross-examination of the witnesses, with certain exceptions.

F.

Statement of Probable Entitlement

23. Although not due until December 14, 2007, MECO filed a Statement of Probable Entitlement ("Statement of Probable Entitlement") on December 7, 2007 that reflects the Parties' agreements as set forth in their Stipulated Settlement Letter, in order to help expedite the issuance of an interim decision and order ("Interim D&O") in this docket. The exhibits to the Statement of Probable Entitlement provide the results of operations for revenues at present and proposed rates for MECO consolidated, the Maui Division, the Lanai Division and the Molokai Division, and reflect an agreed-upon interim rate increase based on a return on common equity of

[7] MECO's present rates are those currently effective in its tariffs and are primarily the result of Amended Decision and Order No. 16922 issued April 6, 1999 in Docket No. 97-0346, which utilized a 1999 test year.

10.7% and a rate of return on rate base of 8.67%.

24. In the Statement of Probable Entitlement, MECO noted that: (1) interim rate relief is essential, as the Company's consolidated rate of return on average rate base is 6.75% at present rates compared to the 8.67% return stipulated to by the Parties; (2) MECO is concerned about the deterioration of its credit rating; (3) MECO proposes to allocate an interim rate increase in electric revenues in the same equal percentage to all divisions and rate schedules; and (4) the Parties' settlement agreement includes the establishment of a pension tracking mechanism and an OPEB tracking mechanism, and thus, MECO sought approval of those tracking mechanisms in the Interim D&O.

25. For purposes of settlement, MECO agreed to exclude the amortization of the test year ending pension amount. In addition, the Parties agreed to modify the proposed pension tracking mechanism to reflect a requirement for MECO to fund the minimum required level under the law until the existing pension asset balance is eliminated. Reduced funding would reduce the pension asset. MECO agreed that when the existing pension asset amount is reduced to zero, the Company will fund the net periodic pension costs ("NPPC") as specified in the pension tracking mechanism for MECO. It was also agreed that if the existing pension asset amount was not reduced to zero by the next rate case, the Parties would address funding requirements for the pension tracking mechanism in that proceeding. The Statement of Probable Entitlement further noted that the pension tracking mechanism will require the Company to create a regulatory asset or regulatory liability, as appropriate, for the difference between the amount of NPPC included in rates and actual NPPC recorded by the Company.

G.

Final Settlement Letter

26. On December 12, 2007, MECO filed a Final Settlement Letter ("Final Settlement Letter") documenting the Parties' agreements on the remaining rate design issues in this proceeding. As shown in Exhibit 1 to the Final Settlement Letter and further discussed below, the Parties' agreements on the remaining cost of service/revenue allocation/rate design issues generally pertained to (1) cost of service studies, (2) inter-class allocation of revenue increases, (3) intra-class rate design, and (4) other revisions to rate schedules/rule changes.

H.

Interim Decision and Order No. 23926

27. On December 21, 2007, the Commission issued Interim Decision and Order No. 23926 ("Interim D&O 23926"), approving, on an interim basis, MECO's request to increase its rates to such levels as will produce, in the aggregate, $13,222,000 in additional revenues, or 3.70%, over revenues at present rates for a normalized 2007 calendar test year. Interim D&O 23926 at 1. Exhibit A of Interim D&O 23296 reflected (1) an average depreciated rate base of $382,970,000; (2) a rate of return on the rate base of 8.67%; and (3) the 2007 results of operations, which the Commission adopted in Interim D&O 23296.

28. Interim D&O 23296 also approved, on an interim basis, the adoption of a pension tracking mechanism and an OPEB tracking mechanism, and MECO's request to allocate the interim increase in electric revenues in the same equal percentage to all divisions and rate schedules.

29. On December 21, 2007, MECO filed its revised tariff sheets reflecting interim

rate increase surcharges, implementing an interim revenue increase of $13,209,700.[8]

II.

Discussion

A.

Revenues

1.

Test Year Estimated Electricity Sales and Customers

30. MECO's total test year sales and customer count projections on a consolidated and island by island basis are as follows:

	Customer Count	MWH Sales
Maui Division	60,694	1,212,929.0
Lanai Division	1,606	29,779.4
Molokai Division	3,141	36,548.2
Total Company	65,441	1,278,256.6

See MECO T-2 at 1-2; MECO-201 at 1-4; Stipulated Settlement Letter, Exhibit 1 at 1-2.

31. In its written testimony, the Consumer Advocate stated that based on its analysis of the information provided by MECO in the Company's updated response to CA-IR-309, the actual test year 2007 sales volumes through August appeared to be tracking very closely to the projected test year levels. See CA-T-3 at 6. Thus, the Consumer Advocate determined that the Company's test year forecast appeared reasonable and did not propose an adjustment to the test year sales or customer count projections. As a result, the Parties agreed to base the test year revenue requirement at present and proposed rates on the test year projections proposed by

[8] The amount is equal to the $13,222,000 interim revenue increase less $12,300 of estimated late payment charges. The late payment charges are based on factors of test year sales of 0.9% for the Maui Division, 0.11% for the Lanai Division, and 0.17% for the Molokai Division, as specified in Item 3, on pages 4-5 of Exhibit 1 of the Stipulated Settlement Letter.

MECO.[9] Stipulated Settlement Letter, Exhibit 1 at 1-2.

2.

Electric Sales Revenues

32. In its direct testimony, MECO's total electric sales revenues, based on the test year sales estimate and average number of customers at present rates and proposed rates, by division and in total for the 2007 test year were:

	Electric Sales Revenues MECO Test Year Estimate	
	Present	Proposed
Maui Division	$333,075,200	$350,632,500
Lanai Division	$10,066,700	$10,597,400
Molokai Division	$12,631,400	$13,297,300
Total Company	$355,773,300	$374,527,200

Stipulated Settlement Letter at 2; MECO T-3 at 1-3; MECO-301.

33. The test year electric sales revenues at present rates are derived by multiplying the test year sales projections for each rate schedule by the current and proposed tariff rates. The projected revenues at present rates also include the revenues derived from the assessment of the Firm Capacity Surcharge and the ECA factor ("ECA Factor") to reflect the monies collected to recover changes in fuel cost from the amount that was recognized in MECO's last rate proceeding. Stipulated Settlement Letter at 2.

34. The revenue for each customer class was presented on MECO-302 through MECO-304. The derivation of the projected revenues is shown on MECO-WP-302 through MECO-WP-304. The ECA Factors applied by MECO to the Company's test year sales

[9] In presenting the MWh sales on MECO-201, page 1, MECO inadvertently did not recognize the 1,000 MWh normalization adjustment to Schedule P that is reflected on page 2 of MECO-201 for the MECO Division. Thus, the total MWh sales on a consolidated and MECO Divisional basis should be increased by 1,000 MWh. However, no adjustment is required to correct this inadvertent error because in computing the Company's test year revenue projections at present and proposed rates, MECO included the additional 1,000 MWH in the Schedule P sales for the Maui Division. As a result, the revenues associated with the 1,000 MWh normalization adjustment are reflected in the Company's test year revenue projections. Stipulated Settlement Letter, Exhibit 1 at 1; MECO-WP-302 at 113.

projections are: $0.13954 per kilowatt-hour ("kWh"), $0.13913 per kWh and $0.15774 per kWh for the Maui, Lanai and Molokai Division, respectively. ECAC revenues are discussed in the Fuel Expense section, below. Stipulated Settlement Letter at 2.

35. In its direct testimony, the Consumer Advocate recommended the following revenue projects for the 2007 test year:

	Present Revenues (000s)
Maui Division	$332,916,000
Lanai Division	$10,067,000
Molokai Division	$12,631,000
Total Company	$355,614,000

Stipulated Settlement Letter, Exhibit 1 at 2-3; CA-101, Schedule C at 1; CA-102, Schedule C at 1; CA-103, Schedule C at 1; CA-104, Schedule C at 1.

36. The difference in the test year revenue projections at present rates is attributed to two differences. First, MECO inadvertently failed to revise the Company's test year revenue projection in the June 2007 update to account for the revenues associated with two customers that had executed contracts as of December 31, 2006 to receive service under the Maui Division's Schedule J, Rider T. As a result, the Consumer Advocate proposed an adjustment of $1,400 to reflect the reduced revenues associated with these two customers using the information provided by MECO as the basis for the adjustment. See CA-T-3 at 5-7; CA-101, Schedule C-2 and MECO's response to CA-IR-206 at 2-3. Second, the Consumer Advocate recommended the application of the following ECA Factors: (a) $0.13941 per kWh for Maui Division, (b) $0.13913 per kWh for the Lanai Division, and (c) $0.15774 per kWh for the Molokai Division. See CA-201 at 1-3. The lower ECA Factor for the Maui Division resulted in a downward adjustment to the Company's test year revenue projection at present rates. Stipulated Settlement Letter, Exhibit 1 at 3.

37. During the settlement discussions, MECO accepted the Consumer Advocate's proposed adjustment for the Maui Rider T participation since the Company acknowledged in response to CA-IR-206 that the test year revenues for the Maui Division should be revised to recognize the reduced revenues associated with the two customers on Schedule J, Rider T. In addition, as discussed below, the Parties have agreed to use the results of MECO's production simulation model, and to use the ECA Factors set forth in MECO's direct testimony for purposes of calculating the 2007 test year revenues at present rates. The table below reflects the Parties' agreement on the test year consolidated electric sales revenue projection at present and proposed rates.

	Present	Proposed
Maui Division	$333,074,000	$343,062,000
Lanai Division	$10,067,000	$11,921,000
Molokai Division	$12,631,000	$13,792,000
Total Company	$355,772,000	$368,775,000

Stipulated Settlement Letter, Exhibit 1 at 3; see Statement of Probable Entitlement, Exhibits 1-4.

3.

Other Operating Revenues

38. In direct testimony, MECO's projected consolidated test year Other Operating Revenues at present and proposed rates were $1,535,000 and $1,759,000, respectively. Stipulated Settlement Letter, Exhibit 1 at 4; MECO T-7 at 49-50; MECO-712.

39. In its direct testimony, the Consumer Advocate accepted the Company's consolidated test year estimate of $1,535,000 at present rates, concluding that such amounts were reasonable based on the Consumer Advocate's analysis of MECO's projection. See Stipulated Settlement Letter, Exhibit 1 at 4; CA-T-3 at 9.

40. The Company's projection of $1,759,000 at proposed rates (consolidated),

however, required adjustment to reflect, for certain of the Company's proposed tariff changes, the projected Other Operating Revenues associated with the Consumer Advocate's test year revenue requirement recommendation for each Division. For example, at Schedule A-1 of CA-101 through CA-104, the Consumer Advocate calculated the late payment fee at proposed rates using a 1.1507% rate for all islands, based on the percentage rate in MECO-WP-2001, page 26, applied to the Consumer Advocate's recommended test year revenue requirement for each Division. Furthermore, the Consumer Advocate found reasonable certain of MECO's proposed tariff changes. See CA-T-5 at 57-58. As a result, the Consumer Advocate proposed to increase the Company's consolidated test year Other Operating Revenue projection at present rates by $224,000, from $1,535,000 to $1,759,000, to reflect the proposed amounts in the Consumer Advocate's test year revenue requirements. Stipulated Settlement Letter, Exhibit 1 at 4.

41. During the settlement discussions, MECO explained that in calculating the Company's test year revenue requirements, the late payment fees were based on specific percentages for each Division (i.e., 0.09%, 0.11% and 0.17% for the Maui, Lanai and Molokai Divisions, respectively). Based on this representation, the Consumer Advocate agreed to use the island specific late payment charge percentage factors in place of the fixed percentage of 1.1507% to more accurately account for late payment revenues at proposed rates for each island. As a result, the Parties agreed to compute the late payment fees at proposed rates for the test year by multiplying a late payment charge factor of 0.09% for the Maui Division, 0.11% for the Lanai Division, and 0.17% for the Molokai Division as proposed by MECO. See MECO T-7 at 55. In addition, the Parties agreed that the balance of the other operating revenue (excluding late payment fees) at proposed rates will include an increase of $207,000 over present rates for the increase in the field collection charge, returned check charge, service establishment charge and

reconnection charge. See Stipulated Settlement Letter, Exhibit 1 at 5 (footnote 1); MECO-712 at 1. The result is a consolidated test year revenue projection at proposed rates of $1,754,000, consisting of $1,585,000 for the Maui Division, $47,000 for the Lanai Division and $122,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 4-5.

B.

Expenses

1.

Fuel Expense, Purchased Power Expense, Generation Heat Rate and ECA Factor

42. The table below reflects the test year consolidated fuel oil, fuel related and purchase power expense projections set forth by MECO and the Consumer Advocate in written testimony. The amounts reflected the results of a production simulation model used by MECO and the Consumer Advocate to determine the optimal dispatch of available generation to meet the test year energy requirements. The energy requirements represent the energy needed to produce the test year sales projection, company use projection and losses in the transformation and delivery.

	MECO Direct	Consumer Advocate Direct	Difference	%Difference
ECAC Revenues	$179,160,000	$179,003,000	$ (157,000)	-0.09%
Fuel Oil Expense	$179,945,000	$179,292,000	$(653,000)	-0.36%
Fuel Related Expense	$520,000	$519,000	$(1,000)	-0.19%
Total Fuel Expense	$180,465,000	$179,811,000	$(654,000)	-0.36%
Purchase Power Expense	$33,982,000	$33,988,000	$6,000	0.02%

Stipulated Settlement Letter, Exhibit 1 at 5.

43. Both MECO and the Consumer Advocate used the same inputs and production simulation program (P-Month) to derive their respective test year fuel oil and related fuel expense and purchased power projections. However, since the Consumer Advocate used a different version of P-Month, the Consumer Advocate's results differed slightly from MECO as noted in the above table. Stipulated Settlement Letter, Exhibit 1 at 5.

a.

Fuel Oil and Fuel-Related Expenses

44. The test year fuel oil expense represents the costs of operating the Company's generation as determined in the production simulation model. The amount is derived by multiplying the estimated test year fuel consumption (in barrels) at each of MECO's generating plants by the fuel prices for each type of fuel consumed at the plant. Stipulated Settlement Letter, Exhibit 1 at 6.

45. During the settlement discussions, MECO and the Consumer Advocate agreed to use MECO's production simulation results since MECO's model has been customized to better reflect the actual operations of the Company. Based on this agreement, the Parties agreed that the test year estimate of fuel expense, including fuel oil expense and fuel related expense is $180,465,000 for MECO consolidated, including $167,037,000 for the Maui Division, $6,175,000 for the Lanai Division, and $7,253,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 6; MECO-401.

b.

ECAC Revenues

46. The changes in the Company's fuel oil and fuel related costs and purchased energy costs from the fuel costs embedded in base rates are recovered through the ECAC. Based

on the agreement to use MECO's production simulation model results, the Parties agree to use MECO's estimate of ECAC revenues of $179,160,300 for test year 2007 at present rates. Stipulated Settlement Letter, Stipulated Settlement Letter, MECO T-3, Attachment 1. The test year ECAC revenues for the MECO Divisions are as follows:

Division	2007 TY ECAC Revenues
Maui	$169,252,000
Lanai	$4,143,100
Molokai	$5,765,200
MECO Consolidated	$179,160,300

Stipulated Settlement Letter, Exhibit 1 at 7.

47. At proposed rates, the Company is proposing to include the fuel additive costs for the Kahului units and distributed generation ("DG") fuel and transportation costs and associated revenue taxes under a new DG energy component in the ECAC.[10] The Company is also proposing to include a weighted efficiency factor in its ECAC calculations (in the same manner as HELCO proposed in Docket No. 05-0315 and HECO proposed in Docket No. 2006-0386), based on fixed efficiency factors for industrial fuel oil ("IFO"), diesel and "other" generating units. Because DG units are generally more efficient than other generating units, the Company proposes to not apply a fixed efficiency factor to DG fuel and transportation costs. See MECO T-19 at 5-10. The Consumer Advocate did not express any objections to the above proposals in its direct testimonies. Stipulated Settlement Letter, Exhibit 1 at 7.

[10] HECO proposed the DG component in Docket No. 04-0113 (HECO's 2005 test year rate case). D&O 24171 in that rate case approved the DG component as stated on page 35: "The Parties agree that the ECAC should continue and that the ECA Factor at present rates is 5.414 cents/kWh. In addition, the Parties agree to HECO's methodology to calculate the ECA Factor, including the DG component proposed by HECO at RT-10. Upon review of the record, and in light of the commission's decision to allow the continuance of the ECAC, the commission finds HECO's ECA Factors to be reasonable."

c.

Purchased Power Expense

48. As noted above, the Parties agreed to use the results of MECO's production simulation, resulting in a test year estimate of $33,982,000 for MECO's purchased power expense, which includes $32,143,000 for purchased energy and $1,839,000 for firm capacity. See MECO-507. The purchased power expense projection only applies to the Maui Division. Stipulated Settlement Letter, Exhibit 1 at 6.

d.

Generation Heat Rate

49. The net generation heat rate is a measure of generation efficiency, and represents the heat content of fuel consumed (in British thermal units or "Btus") per net kWh generated. That is, for MECO in the test year, an estimated 10,001 Btus of fuel heat are required for the MECO units, on average, to produce one kWh of energy. MECO T-4 at 39.

50. The net generation heat rate directly affects the sales heat rate. The sales heat rate is calculated in a similar manner as the net heat rate, except the sales heat rate is the heat content of the fuel consumed per kWh of sales. The sales heat rate in the form of a Generation Efficiency Factor is used in the ECAC to translate the base generation cost in cents per MBtu to the weighted base generation cost in cents per kWh of sales. MECO T-4 at 40.

51. As a result of the production simulation modeling that is done to determine the test year fuel and purchased power expense, a new fixed efficiency factor is determined for purposes of the ECA Factor that will be applied on a prospective basis, once the Commission authorizes new base rates. Based on the Parties' agreement to use the results of MECO's production simulation model, the Parties agree that the sales heat rates used in the ECAC as the

fixed efficiency factors at proposed rates are:

	Efficiency Factor (mmbtu/kwh)		
	Maui	Lanai	Molokai
Industrial Fuel Oil	0.015311	0.000000	0.000000
Diesel	0.009460	0.010577	0.010823
Other	0.010648	0.010577	0.010823

Stipulated Settlement Letter, Exhibit 1 at 6; MECO-1906 at 1; MECO-1910 at 1; MECO-1912 at 1.

52. In addition, to derive the above, MECO applied a calibration factor based on the 2005 operations to its production simulation results to adjust the fuel consumption results for actual operating conditions that cannot be completely duplicated by the computer model. Based on the observation that the 2005 energy generation mix is very similar to the energy generation mix projected for the 2007 test year, the Consumer Advocate concluded that applying the 2005 calibration factor as proposed by MECO is appropriate for this proceeding. The Consumer Advocate recommended, however, that MECO continue to be required to provide annual calibration reports to allow the Commission and Consumer Advocate an opportunity to monitor the difference between the estimated and actual results produced from the use of the production simulation model. See CA-T-2 at 19-20. MECO agrees to file annual reports on its calibration factor. Stipulated Settlement Letter, Exhibit 1 at 6-7.

2.

Other Production O&M Expenses and Transmission and Distribution O&M Expenses

a.

Other Production O&M Expenses

53. MECO incurs significant non-fuel Production Operations and Maintenance

("O&M") expenses to operate and maintain the Company's generating facilities that are located at the Kahului and Maalaea Power Plants and at Hana on the island of Maui, Miki Basin on the island of Lanai and Palaau on the island of Molokai. The Production O&M expenses are recorded in National Regulatory Utility Commission ("NARUC") Account Nos. 500 through 557. The costs charged to these accounts comprise employee labor, materials, contract labor, engineering, environmental and other administrative function and service costs. Stipulated Settlement Letter, Exhibit 1 at 9.

54. In its direct testimony, MECO's consolidated test year 2007 normalized production O&M expense projection was $21,014,800,[11] including $18,741,800 for the Maui Division, $1,094,400 for the Lanai Division, and $1,178,600 for the Molokai Division. See MECO-502. These amounts are comprised of O&M expenses as noted in the following table.

	Operation	Maintenance	Total Production O&M
Maui Division	$8,314,500	$10,427,300	$18,741,800
Lanai Division	$664,500	$429,900	$1,094,400
Molokai Division	$695,100	$483,500	$1,178,600
Total Company	$9,674,200	$11,340,700	$21,014,800

Stipulated Settlement Letter, Exhibit 1 at 9.

55. Subsequently, in its June 2007 Update for MECO T-5, Attachment 1, filed on July 3, 2007, MECO increased its test year Production O&M expense projections by $471,558, consisting of $57,724 and $413,834 in labor and non-labor costs, respectively. The $471,558 adjustment was intended to recognize the additional expenses that were anticipated to be billed by HECO for support from the new HECO Power Supply Competitive Bidding Division. These expenses included MECO's allocated share of the additional labor costs for staff additions to

[11] The normalized test year Production O&M expense reflected an adjustment of approximately $3.4 million to, among other things, primarily remove from the Company's 2007 budget, costs that MECO believes are associated with higher than normal overhaul work activities anticipated to be performed in the 2007 test year. The basis for this normalization adjustment is discussed in MECO T-5 at 23-25 and reflected on MECO-505.

HECO's new division, as well as additional costs that are anticipated to be incurred through the year 2009. The adjustment resulted in an updated consolidated test year Production O&M expense projection of $21,487,000 (i.e., $21,014,800 + $471,600 = $21,486,400 rounded.) Stipulated Settlement Letter, Exhibit 1 at 9; MECO response to CA-IR-304, Attachment A at 1.

56. In its direct testimony, the Consumer Advocate recommended the following Production O&M expense projections:

	Operation	Maintenance	Total Production O&M
Maui Division	$8,172,000	$10,349,000	$18,521,000
Lanai Division	$615,000	$429,000	$1,044,000
Molokai Division	$682,000	$482,000	$1,164,000
Total Company	$9,469,000	$11,260,000	$20,729,000

Stipulated Settlement Letter, Exhibit 1 at 9-10.

57. In determining the above, the Consumer Advocate agreed with MECO's normalization of the generating overhaul costs for purposes of determining the 2007 test year revenue requirement (see MECO-WP-505) based on the determination that the calculations set forth by MECO reflected a systematic and rational approach to developing an adjusted normal overhaul expense level of ratemaking purposes. The Consumer Advocate concluded, however, that some of the other ratemaking adjustments proposed by MECO to reclassify, restate or normalize the 2007 budgeted amounts for fuel additives, biodiesel, lube oil and Nitrogen Oxide ("NO_X") water expenses required revisions. In addition, the Consumer Advocate concluded that the Company's adjustment to reflect the increased allocation of costs from HECO for competitive bidding support was not reasonable. As a result, on pages 18-19 of CA-T-3, the Consumer Advocate proposed the following six adjustments to MECO's normalized test year estimate of production O&M expense:

(1) a labor adjustment to remove the costs associated with new employee positions that have not been filled for the entire 2007 test year. (see CA-T-3 at 20-22; CA-101, Schedule C-13);

(2) an adjustment to reduce the estimated non-labor consulting and legal expenses expected to be incurred by HECO to support competitive bidding activities on behalf of MECO (see CA-T-3 at 22-27; CA-101, Schedule C-4);

(3) an adjustment to correct an error in the Company's lube oil consumption rate and to reflect the last known actual prices of lube oil in computing the test year expense estimate (see CA-T-3 at 27-24; CA-101, Schedule C-5);

(4) an adjustment to normalize the structural maintenance expense for the Kahului station (see CA-T-3 at 28-32; CA-101, Schedule C-6);

(5) an adjustment to update and refine the normalization adjustment proposed by MECO for the water treatment expenses incurred to purify water used for NO_X emission control at the Maalaea station (see CA-T-3 at 32-34; CA-101, Schedule C-7); and

(6) an adjustment to normalize the test year emission fee expense amount for ratemaking purposes based upon the actual expense incurred in prior years (see CA-T-3 at 35-37; CA-101 Schedule C-8).

Stipulated Settlement Letter, Exhibit 1 at 10.

58. For purposes of settlement, MECO and the Consumer Advocate have reached agreement on all six of the above adjustments, either accepting or revising each Consumer Advocate adjustment as described in greater detail below. The result is a test year 2007 other production O&M expense of $20,848,000 for MECO consolidated, including $18,639,000 for

the Maui Division, $1,045,000 for the Lanai Division, and $1,164,000 for the Molokai Division.

	Operation	Maintenance	Total Production O&M
Maui Division	$8,350,000	$10,289,000	$18,639,000
Lanai Division	$616,000	$429,000	$1,045,000
Molokai Division	$682,000	$482,000	$1,164,000
Total Company	$9,648,000	$11,200,000	$20,848,000

Stipulated Settlement Letter, Exhibit 1 at 10-11.

59. Payroll Expense Adjustment. In its direct testimony, MECO proposed to include $3,902,300 of production maintenance[12] labor expense in the 2007 test year. This amount reflects the costs associated with three new employees (i.e., a Senior Helper at the Kahului Power Plant, an Electrician at the Maalaea Power Plant, and an Operator Helper at the Lanai Power Plant). As a result, the 2007 test year Production O&M Labor expense reflects the payroll costs associated with a staff of 123 employees for the entire 2007 test year, as compared to 121 employees in 2005. Stipulated Settlement Letter, Exhibit 1 at 11; MECO-1102 and MECO T-5 at 29[13], 36.

60. In its written testimony, the Consumer Advocate raised a concern with MECO's assumption that the Company would be fully staffed for the entire 2007 test year. As discussed in CA-T-3 and CA-T-1, the Consumer Advocate maintained that there is no factual support for MECO's assumption that it will never experience vacancies in its workforce. The Consumer Advocate further maintained that it would be inappropriate to recognize MECO's higher forecast level of employees for ratemaking purposes because (1) it is common for employee vacancies and the hiring of new employees to result in overall headcount levels that fluctuate from month-to-month, and (2) it would be highly inconsistent and improper to intentionally set utility rates on

[12] The Stipulated Settlement Letter, Exhibit 1 at 11 stated "In its direct testimony, MECO proposed to include $3,902,300 of production labor expense in the 2007 test year." The Company clarifies that the $3,902,300 was for production maintenance labor expense.

[13] The Stipulated Settlement Letter, Exhibit 1 at 11 cited MECO T-5 at 17. The correct reference should be MECO T-5 at 29.

an overall cost of service that fixes employee counts at a hypothetical end-of-period forecast level, while not similarly and consistently annualizing customer growth, changes in energy usage or changes in other expenses that are expected to occur in the forecast year. As a result, the Consumer Advocate proposed a consolidated Production O&M labor expense adjustment of $196,368 to reduce MECO's test year expense estimate for the labor costs associated with 2.5 employee positions. The proposed adjustment was based on the simple average of the Company's actual number of Production employees at the beginning and forecasted employee count at the end of the test year (i.e., December 31, 2006 and December 31, 2007, respectively). The adjustment reduced MECO's Production O&M labor expense projection for the Maui, Lanai and Molokai Divisions by $153,076, $42,274, and $1,018, respectively. It should also be noted that the payroll adjustment (i.e., CA Adjustment C-13) encompassed all MECO expense account blocks, including transmission and distribution ("T&D"), customer service, customer accounts, and administrative and general ("A&G"). The settlement of the specific adjustments proposed for T&D, customer service, customer accounts, and A&G is further discussed below. See Stipulated Settlement Letter, Exhibit 1 at 11.

61. During the settlement discussions, the Company represented that an employee was offered and accepted employment in December 2006, but began employment on January 3, 2007 for responsibility area ("RA") "MGD." In addition, since the position was filled in January of 2007, MECO represented that the level of employees for RA "MGD" remained at a minimum of 21 employees through September 2007. See response to CA-IR-112, updated September 2007, Attachment A at 7. Based on the above, MECO proposed to reduce the Consumer Advocate's Production labor expense adjustment by $40,257[14] (see Stipulated Settlement Letter,

[14] MECO T-11, Attachment 3(AAA) shows $40,258. The $1 difference is due to rounding.

MECO T-11, Attachment 3(AAA)) to reflect this employee's compensation in determining the test year labor costs. After reviewing the information provided by MECO, the Consumer Advocate agreed to revise its adjustment to reflect the compensation for 2.0 employees (versus the 2.5 employees upon which the Consumer Advocate based its $196,368 adjustment), recognizing that the MGD position was already included in MECO's forecast employee count at test year end. The result is a revised adjustment of $156,111, including $112,819 for the Maui Division, $42,274 for the Lanai Division, and $1,018 for the Molokai Division. See Stipulated Settlement Letter, MECO T-11, Attachments 3, 3(AA) and 3(A). For purposes of settlement, MECO agrees to accept the Consumer Advocate's revised adjustment. Stipulated Settlement Letter, Exhibit 1 at 11-12.

62. Competitive Bidding Expense. As noted above, MECO increased its 2007 test year estimate for other production O&M expense by $471,558 to include the additional costs associated with competitive bidding activities. The $471,558 projection is comprised of $57,724 for labor (i.e., $52,839 + $4,885 = $57,724) and $413,834 for non-labor costs that are billed by HECO as compensation for the competitive bidding support activities performed on behalf of MECO. Stipulated Settlement Letter, Exhibit 1 at 12; see MECO response to CA-IR-317, Attachment A, at 1; June 2007 Update, MECO T-5, Attachment 1.

63. In direct testimony, the Consumer Advocate did not object to the inclusion of the additional labor expenses for staffing additions that are occurring in connection with the reorganization and creation of HECO's Power Supply System Planning Department, as explained in MECO's response to CA-IR-317, Attachment A. The Consumer Advocate noted that the newly created positions have either been or will be filled by mid-year, and MECO has included the labor costs associated with these positions using a half-year convention, which is

consistent with the Consumer Advocate's approach to averaging the labor costs for new staff positions. The Consumer Advocate maintained, however, that MECO had overstated the additional non-labor expenses that will be incurred in 2007 for competitive bidding activities because MECO's projection is based on the average costs anticipated to be incurred in 2007, 2008 and 2009. The Consumer Advocate contended that MECO's proposal to include costs that will be incurred outside the test year in determining the test year competitive bidding expense is not reasonable and violates the test year concept. See CA-T-3 at 24-25. As a result, the Consumer Advocate proposed an adjustment of $275,684 to reduce MECO's test year 2007 non-labor competitive bidding expense, resulting in a test year non-labor estimate of $138,150 (i.e., $413,834 - $275,684) to be billed by HECO. The Consumer Advocate's adjustment is based on the updated 2007 estimate of $276,300 provided in MECO's response to CA-IR-317, Attachment A at 3, reduced by 50% to reflect the costs that are billed to MECO, or $138,150. Stipulated Settlement Letter, Exhibit 1 at 12; see CA-T-3 at 27; CA-101, Schedule C-4.

64. For purposes of settlement, MECO accepts the Consumer Advocate's proposed adjustment, resulting in a total test year competitive bidding expense allocation from HECO of $195,874, comprised of $57,724 for labor and $138,150 for non-labor costs. Stipulated Settlement Letter, Exhibit 1 at 13.

65. Lube Oil Expense. In its direct testimony, MECO's consolidated test year estimate for lube oil expense was $1,036,942, including $915,524 for the Maui Division, $47,344 for the Lanai Division, and $74,074 for the Molokai Division. See MECO-509 at 1. These amounts include lube oil required for MECO's diesel generating units as well as its combustion turbine ("CT") units. Stipulated Settlement Letter, Exhibit 1 at 13.

66. The Consumer Advocate proposed to reduce MECO's test year 2007 lube oil

expense for its diesel units by $146,048 to correct an error made by MECO in calculating the lube oil consumption rates for the Mitsubishi diesel units as shown in the response to CA-IR-217, Attachment 1 and to reflect the last known actual unit prices. The $146,048 represents an adjustment of $133,708, $4,135, and $8,205 to the Maui, Lanai and Molokai Divisions, respectively, and is based on information provided by MECO in the Company's confidential response to CA-IR-326. Stipulated Settlement Letter, Exhibit 1 at 13; see CA-T-3 at 27-28; CA-101, Schedule C-5.

67. MECO accepts the Consumer Advocate's proposed adjustment, resulting in a consolidated test year estimate of $890,894, consisting of $781,816, $43,209, and $65,869 for the Maui, Lanai and Molokai Divisions, respectively. Stipulated Settlement Letter, Exhibit 1 at 13.

68. Kahului Power Plant Structural Maintenance Expense. In its direct testimony, MECO included $329,597 for Kahului Power Plant structural maintenance expense. See MECO response to CA-IR-226, Attachment 1 at 2. These expenses reflect the costs of performing periodic inspections, painting and repairs to the building and other structures at each generating station. These activities and costs tend to fluctuate from year to year since discrete large structural maintenance activities occur occasionally on an as-needed basis. Stipulated Settlement Letter, Exhibit 1 at 13.

69. The Consumer Advocate observed that MECO analyzed the historical expenditure levels for structural station-wide maintenance activities at the Maalaea and Palaua stations and calculated a normalized expense amount for ratemaking purposes as shown on MECO-WP-504f and -504g. The Company did not, however, perform the same type of analysis for the structural maintenance activity costs for the Kahului Power Plant. As a result, the Consumer Advocate

proposed an adjustment of $78,146 to reflect a normalized Kahului Power Plant structural maintenance expense, as reflected in MECO's response to CA-IR-226, Attachment 1 at 2; Stipulated Settlement Letter, Exhibit 1 at 13; see CA-T-3 at 28-32; CA-101, Schedule C-6.

70. During the settlement discussions, MECO explained that the Company's test year projection of $329,597 for structural maintenance at the Kahului Power Plant ("KPP") was reasonable for the following reasons:

(1) The 2007 recorded expense for KPP structural maintenance through August 2007 is $247,844, and the total 2007 expense will exceed MECO's test year estimate of $329,597. In September 2007, MECO issued a purchase order for $93,369 as part of the cost to repair the verac on bulk tank #2, which will bring the 2007 recorded expenses to at least $341,213.

(2) MECO has provided information on specific projects that indicate that the higher test year level of expenses will continue through 2012. In addition, the recorded KPP structural maintenance expense for 2006 of $293,212, was substantially higher than the level of expenses incurred from 2001 through 2005, and indicates that the higher level of KPP structural maintenance expense reflected in MECO's test year estimate began in 2006.

(3) The Consumer Advocate's statement that "after completion of the current cycle of concentrated structural work at KPP, the normalized $251,451 amount included in rates established in this proceeding will likely exceed the actual incurred annual costs" is not supported by any evidence of the level of structural maintenance expenses beyond 2012.

(4) The rates established in this rate case are not expected to continue beyond 2012, since MECO will likely have another rate case before 2013.

Stipulated Settlement Letter, Exhibit 1 at 13-14.

71. Based on the above, for purposes of settlement, MECO and the Consumer Advocate agreed to reverse the Consumer Advocate adjustment and include MECO's test year estimate of $329,597 for KPP structural maintenance expense. Stipulated Settlement Letter, Exhibit 1 at 14.

72. <u>Maalaea Power Plant NO_X Water Expense</u>. In its direct testimony, MECO included $293,291 as a normalization adjustment for Nox water costs at the Maalaea Power Plant. This amount was derived by calculating the water treatment expenses as a ratio of fuel burn quantified for the test year and relies on the average incurred NO_X water treatment expenses from 2003 through 2005, factored up for an assumed inflation increase and then divided by the actual fuel burned during 2003-2005. The estimated cost factor was then multiplied by the test year projected fuel burn barrels to calculate the adjusted test year expense of $293,291. Stipulated Settlement Letter, Exhibit 1 at 14; <u>see</u> MECO-WP-504d.[15]

73. In its written testimony, the Consumer Advocate contended that MECO's adjustment appeared to be based on two flawed assumptions: (a) that NO_X water treatment expenses are subject to inflation, and (b) that NO_X water treatment expenses always vary directly with the amount of fuel being burned, with no efficiency gains achievable through improved technology. These objections were based on the historical actual NO_X water treatment expenses and fuel burn quantities at Maalaea. In addition, the Consumer Advocate noted that MECO made changes to its NO_X water facilities that cause the historical water treatment costs as used in

[15] Stipulated Settlement Letter, Exhibit 1 at 14 incorrectly cited MECO-WP-501d. The reference should be MECO-WP-504d.

the Company's normalization calculations to be unreliable in predicting future cost levels. As a result, the Consumer Advocate proposed an adjustment to reduce MECO test year 2007 Maalaea Power Plant NO_X water expense by $44,839, resulting in a test year projection of $248,452. The adjustment effectively reversed the Company's normalization adjustment and results in an expense projection that represents the amount included in MECO's 2007 budget prior to the normalization adjustment proposed by MECO. Stipulated Settlement Letter, Exhibit 1 at 14-15; see MECO-WP-504d;[15] CA-T-3 at 33-34; CA-101, Schedule C-7.

74. For purposes of settlement, MECO accepts the Consumer Advocate's proposed adjustment resulting in a test year expense for Maalaea Power Plant NO_X water of $248,452. Stipulated Settlement Letter, Exhibit 1 at 15.

75. Emission Fee Expense. MECO pays emission fees to the Hawaii Department of Health ("DOH") as a contribution to the State's clean air fund, based on the utility's calculated quantities of air pollution emissions at a dollar per ton rate that is established by the DOH. In its direct testimony, MECO included $404,998 for MECO's consolidated test year emission fee expense, including $363,987 for the Maui Division, $17,733 for the Lanai Division, and $23,278 for the Molokai Division. See MECO responses to CA-IR-104 at 2; CA-IR-2, Attachment 30a. Subsequently, MECO revised its emission fee expense for test year 2007 to $463,562, to reflect a higher emission fee rate of $57.14 per ton. Stipulated Settlement Letter, Exhibit 1 at 15; see MECO response to CA-IR-327, Attachment A.

76. In its written testimony, the Consumer Advocate noted that while in most historical years the calculated fees are assessed by and paid to the DOH, in some prior years such fees have been entirely waived. As a result, the Consumer Advocate proposed an adjustment to normalize the test year emission fee expense projection and recognize that in some years, the

fees have been waived and not paid to the DOH. The Consumer Advocate's adjustment reduced MECO consolidated 2007 test year expenses for emission fees by $16,182, including reductions of $7,389, $3,800, and $4,993, for the Maui, Lanai, and Molokai Divisions, respectively. The adjustment was made to MECO's updated test year emission fee estimate set forth in the Company's response to CA-IR-327 and effectively reduced such amounts by 3/13ths because MECO has only paid emission fees in 10 of the last 13 years. In support of its adjustment, the Consumer Advocate observed that its proposed adjustment is consistent with the adjustments made by the Company in the most recent HECO and HELCO rate cases. Stipulated Settlement Letter, Exhibit 1 at 15; see CA-T-3 at 36; CA-101, Schedule C-8.

77. For purposes of settlement, MECO accepts the Consumer Advocate's proposed adjustment, resulting in a consolidated test year expense for emission fees of $388,818, consisting of $356,598, $13,933 and $18,285 for Maui, Lanai and Molokai Divisions, respectively. Stipulated Settlement Letter, Exhibit 1 at 15.

b.

Transmission and Distribution Operations and Maintenance Expenses

78. T&D O&M expense includes the labor and non-labor items incurred in the operation and maintenance of MECO's T&D system. These items are captured in the following NARUC series of accounts:

560-567	-	Transmission Operation Expenses
568-573	-	Transmission Maintenance Expenses
580-589	-	Distribution Operation Expenses
590-598	-	Distribution Maintenance Expenses

Stipulated Settlement Letter, Exhibit 1 at 15-16.

79. In its direct testimony, MECO stated that its 2007 T&D O&M expense forecast is greater than the trend at which the Company's T&D expenses have generally increased on an

annual basis since 2001 due to increased vegetation management efforts, system plant aging, increased inspections, and technological changes and improvements, as well as other factors such as increased labor cost, cost of materials, growth in the T&D utility plant, mapping expenses, and staffing changes.

80. MECO's total test year T&D O&M expense projections on a consolidated and island-by-island basis are as follows:

	T&D O&M Expenses MECO Test Year Estimate			
	Transmission	Distribution	Total	Source
Maui Division	$2,243,594	$5,644,523	$7,888,117	MECO-602
Lanai Division	$0	$238,407	$238,407	MECO-602
Molokai Division	$33,144	$453,673	$486,817	MECO-602
Total Company	$2,276,738	$6,336,603	$8,613,341	MECO-602

Stipulated Settlement Letter, Exhibit 1 at 16.

81. In its direct testimony, the Consumer Advocate's proposed T&D O&M expense projections on a consolidated and island-by-island basis were as follows:

	T&D O&M Expenses Consumer Advocate Test Year Estimate			
	Transmission	Distribution	Total	Source
Maui Division	$2,023,286	$5,139,696	$7,162,982	CA-102, Schedule C at 1
Lanai Division	$0	$237,334	$237,334	CA-103, Schedule C at 1
Molokai Division	$31,090	$426,490	$457,580	CA-104, Schedule C at 1
Total Company	$2,054,376	$5,803,520	$7,857,896	CA-101, Schedule C at 1

Stipulated Settlement Letter, Exhibit 1 at 16.

82. The Consumer Advocate's recommendation differed from MECO's due to the following two adjustments proposed by the Consumer Advocate:

(1) an adjustment to reduce the labor costs associated with new employee positions that have not been filled for the entire 2007 test year (see CA-T-1 at 67-79; CA-101, Schedule C-13); and

(2) an adjustment to normalize the T&D O&M non-labor outside contract services expense estimate.

Stipulated Settlement Letter, Exhibit 1 at 16-17.

83. For purposes of settlement, MECO and the Consumer Advocate have reached agreement on both of the above adjustments, as described in greater detail below. The result is a total test year T&D O&M expense projection on a consolidated and island-by-island basis as follows:[16]

	T&D O&M Expenses		
	Transmissions	Distribution	Total
Maui Division	$2,063,759	$5,242,718	$7,306,476
Lanai Division	$0	$246,108	$246,108
Molokai Division	$30,955	$424,825	$455,780
Total Company	$2,094,713	$5,913,651	$8,008,364

Stipulated Settlement Letter, Exhibit 1 at 17; Statement of Probable Entitlement, Exhibits 1-4 at 1.

84. Payroll Expense Adjustment. In its direct testimony, MECO proposed to include $774,690 of transmission labor expense and $3,648,461 of distribution labor expense in the 2007 test year. MECO-603 at 1-2. This amount included the costs associated with five additional positions (i.e., a vehicle mechanic, an environmental specialist, a senior inspector, a system inspector and a T&D analyst) in the T&D Department, two additional positions (i.e., a staff engineer and a customer designer) in the Engineering Department (MECO T-6 at 35-37) and

[16] Note: slight difference due to rounding.

certain positions that were unfilled at the beginning of the test year. The Company's 2007 test year labor expense reflected payroll costs associated with a staff of 111 in the T&D Department and 31 in the Engineering Department for the entire test year compared to 96 employed in the T&D Department and 29 employed in the Engineering Department at the end of December 2006. As of September 2007, the T&D Department and the Engineering Department had headcounts of 108 and 31, respectively. Stipulated Settlement Letter, Exhibit 1 at 17; MECO response to CA-IR-112.

85. For the reasons discussed above, the Consumer Advocate proposed a consolidated T&D O&M labor expense adjustment of $185,006 to reduce MECO's test year labor expense estimate for the labor costs associated with 8.5 employee positions. The proposed adjustment was based on the simple average of the Company's actual number of T&D employees at the beginning and the forecasted employee count at the end of the test year (i.e., December 31, 2006 and December 31, 2007, respectively). The adjustment reduced MECO's T&D O&M labor expense projection for the Maui, Lanai and Molokai Divisions by $179,355, $3,715, and $1,935, respectively. Stipulated Settlement Letter, Exhibit 1 at 17-18.

86. During the settlement discussions, the Company represented that an employee was offered and accepted employment in November 2006, but began employment on January 15, 2007 for RA "MDE." In addition, since the position was filled in January 2007, MECO represented that the level of employees for RA "MDE" remained at a minimum of 10 employees through September 2007. See response to CA-IR-112, updated September 2007, Attachment A at 7. Based on the above, MECO proposed to reduce the Consumer Advocate's T&D labor expense adjustment by $26,881 (see Stipulated Settlement Letter, MECO T-11, Attachment 3(AAA)) to reflect this employee's compensation in determining the test year labor costs. After

reviewing the information, the Consumer Advocate agreed to revise its adjustment to reflect the compensation for 8.0 employees (versus the 8.5 employees upon which the Consumer Advocate based its original adjustment), recognizing that the MDE position was already included in MECO's forecast employee count at test year end. Stipulated Settlement Letter, Exhibit 1 at 18.

87. Further, the Company represented that in the first six months of 2007 it incurred unbudgeted overtime for RAs "MDK" and "MDR" and proposed reducing the Consumer Advocate's T&D labor expense adjustment by an additional $130,972. After reviewing the information the Consumer Advocate contended that its concerns were not entirely alleviated with the additional information provided by MECO. In the interest of compromise, however, the Consumer Advocate analyzed the additional information supplied by MECO and agreed, for purposes of settlement, to revise its adjustment to recognize a partial offset of $45,700 for additional overtime compensation for RAs MDK and MDR. <u>See</u> Stipulated Settlement Letter, MECO T-11, Attachments 3(AA) and 3(B). Stipulated Settlement Letter, Exhibit 1 at 18.

88. The revisions discussed above reduced the Consumer Advocate's adjustment decreasing the consolidated T&D O&M labor expense by $112,426, including reductions of $110,233 for the Maui Division, $1,058 for the Lanai Division, and $1,135 for the Molokai Division. <u>See</u> Stipulated Settlement Letter, MECO T-11, Attachments 3 and 3(AA). For purposes of settlement, MECO accepts the Consumer Advocate's revised adjustment. Stipulated Settlement Letter, Exhibit 1 at 18.

89. <u>Outside Services Adjustment</u>. MECO's 2007 test year estimate for T&D expenses included $2,071,455 of outside services costs, of which $898,023 was for vegetation management. The remainder was for other outside services for specialized functions such as steel pole maintenance, helicopter work, road maintenance, maintenance of proprietary software

and waste oil disposal. Stipulated Settlement Letter, Exhibit 1 at 18; response to CA-IR-338.

90. In direct testimony, the Consumer Advocate proposed a consolidated T&D O&M non-labor expense reduction of $570,440, including $545,780 for the Maui Division (see CA-102, Schedule C-19), $(2,642) for the Lanai Division (see CA-103, Schedule C-19), and $27,302 for the Molokai Division (see CA-104, Schedule C-19) to normalize the outside contract services expense for the 2007 test year. The adjustment was based on the three-year average of costs incurred from 2005 through 2007 since the Consumer Advocate noted that the T&D outside service costs fluctuated from year-to-year. Stipulated Settlement Letter, Exhibit 1 at 18-19; see CA-T-1 at 97-99; CA-101, Schedule C at 4 and Schedule C-19.

91. During the settlement discussions, the Company agreed that an adjustment may be warranted to its original consolidated outside service forecast of $2,071,455, but disagreed as to the amount of the adjustment. MECO proposed to reduce the Consumer Advocate's consolidated adjustment by $177,889, resulting in a consolidated outside service projection for the test year of $1,678,904. This amount was: (1) based on a five- versus three-year average of outside services expense in order to mitigate the reduced spending that occurred in 2005 and 2006; and (2) reflected the normalization reductions that were made by MECO to the Company's outside services expense projection to offset the higher than budgeted annual production maintenance expenses for 2007. Stipulated Settlement Letter, Exhibit 1 at 19; see Stipulated Settlement Letter, MECO T-6, Attachment 4.

92. After reviewing this information, the Consumer Advocate agreed, in the interest of compromise and to settle this issue, to revise its adjustment by $77,889 (see Stipulated Settlement Letter, MECO T-6, Attachment 4) to reflect a five-year average for outside services expense. For purposes of settlement, the Company accepts the Consumer Advocate's revised

adjustment. As a result, the Parties agree on a total consolidated T&D O&M non-labor consolidated outside services projection of $1,578,904. The expense related adjustment reducing expense by $492,551, including a $471,408 reduction for the Maui Division, an $8,759 increase for the Lanai Division, and a $29,902 reduction for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 19; see MECO T-6, Attachment 4.

3.

Customer Accounts Expenses, Allowance for Uncollectibles, and Customer Service Expense

a.

Customer Accounts

93. Customer Accounts expenses are those expenses primarily related to managing and maintaining services and information related to customer account services and customer account management. See MECO T-7 at 3. The type of activities associated with the Customer Accounts expenses (and that are performed by the Company's Customer Service Department) include: (1) customer billing and mailing, (2) meter reading, (3) collecting and processing payments, (4) handling customer inquiries, (5) maintaining customer records, (6) managing delinquent and uncollectible accounts, and (7) conducting field services and investigations. In addition, Customer Accounts expenses include the Allowance for Uncollectible Accounts (i.e., Account No. 904) as described further below. Stipulated Settlement Letter, Exhibit 1 at 19; See MECO T-7 at 4.

94. In its direct testimony, MECO's total projected consolidated test year Customer Accounts expenses amounted to $3,300,000. See MECO T-7 at 2. As such, without including an allowance for uncollectible accounts expenses, the projected consolidated test year Customer Accounts expenses are estimated to be $3,086,000 (i.e., $3,300,000 (MECO-701) less

uncollectibles of $214,000 (MECO-711 at 1)). 'As indicated herein, the Company's projections for Customer Accounts expenses were based on either recorded averages, historical trends, adjusted for special situations or recent changes that will result in material impacts. Stipulated Settlement Letter, Exhibit 1 at 19-20.

95. In its direct testimony, the Consumer Advocate recommended a test year consolidated customer accounts expense estimate of $3,015,659 (CA-101, Schedule C at 1), excluding allowance for uncollectible accounts, resulting in a reduction of approximately $70,000 (i.e., $70,341 rounded) to the Company's projected consolidated test year labor cost estimate. Stipulated Settlement Letter, Exhibit 1 at 20; see CA-101, Schedule C at 3; CA-101, Schedule C-13.

96. For purposes of settlement, MECO and the Consumer Advocate have reached agreement on the payroll adjustment as discussed below. As a result of the above stipulated adjustment in connection with payroll expense adjustment for Customer Accounts, noted above, the Parties agreed on a consolidated test year estimate of $3,017,000 (i.e., $3,017,329 rounded) for Customer Accounts expenses, excluding the allowance for uncollectible accounts, consisting of $2,709,329 for the Maui Division, $139,000 for the Lanai Division and $169,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 20.

97. Payroll Expense Adjustment. For the reasons discussed above, in its direct testimony, the Consumer Advocate proposed a consolidated (and Maui Division) Customer Accounts O&M labor expense adjustment of $70,341 to reduce MECO's test year labor expense estimate for the labor costs associated with 0.5 employee positions plus allocated labor expense for production, transmission and distribution RAs. The proposed adjustment was based on the simple average of the Company's actual beginning of year and forecasted end of year Customer

Accounts employee count (i.e., December 31, 2006 and December 31, 2007, respectively). Stipulated Settlement Letter, Exhibit 1 at 20; see CA-T-1 at 67-79; CA-101, Schedule C-13.

98. During the settlement discussions, the Company represented that in the first six months of 2007, it incurred unbudgeted overtime for RA "MDR" and, therefore, proposed reducing the Consumer Advocate's Customer Accounts labor expense adjustment of $70,341 by $1,670. See Stipulated Settlement Letter Attachment Stipulated Settlement Letter, MECO T-11, Attachment 3(AAA), and the Payroll Expense Adjustment section for T&D above. After reviewing the information, the Consumer Advocate agreed to revise its consolidated (and Maui Division) proposed adjustment to $68,671. See Stipulated Settlement Letter Attachment Stipulated Settlement Letter, MECO T-11, Attachments 3, 3(AA) and 3(C). For purposes of settlement, MECO accepted the Consumer Advocate's revised adjustment. Stipulated Settlement Letter, Exhibit 1 at 20.

b.

Allowance for Uncollectible Accounts

99. In its direct testimony, MECO's test year consolidated allowance for uncollectible accounts was estimated to be $214,000 at present rates (consisting of $200,000, $6,000 and $8,000 for the Maui, Lanai and Molokai Divisions, respectively), and $225,000 (consisting of $209,000, $7,000 and $9,000 for the Maui, Lanai and Molokai Divisions, respectively) at proposed rates. See MECO-711 at 1. The test year estimate of uncollectibles differs between present and proposed rates because the amount is based upon the Company's electric sales revenues multiplied by an "uncollectible factor" (aka, Percentage of Electric Sales Revenues methodology). See MECO T-7 at 28. As such, the proposed rates for the total Company and by Division (Maui, Lanai and Molokai) were based on the application of an "uncollectible factor" of

0.06% to test year revenues at present and proposed rates. Stipulated Settlement Letter, Exhibit 1 at 20-21; see MECO-WP-711 at 1.

100. The Consumer Advocate, in its direct testimony accepted the $214,000 test year consolidated allowance for uncollectible accounts expense amount, at present rates, as reasonable, as it believed such amount is consistent with recently incurred amounts of uncollectibles actually written off by MECO. See CA-T-3 at 44. However, the Consumer Advocate disagreed with MECO utilizing the "Percentage of Electric Sales Revenue" methodology for calculating the allowance for uncollectible accounts expense amount, at proposed rates. The Consumer Advocate thus recommended that the rate increase granted in this proceeding not be factored up by $11,000 (as initially proposed by MECO) for presumed increases in uncollectible expenses, at proposed rates, because the Consumer Advocate contended that there is an "absence of a linear relationship between revenues and uncollectibles." Thus, the Consumer Advocate included a zero value in its Revenue Conversion Factor schedule set forth in CA-101, Schedule A-1, line 7. Stipulated Settlement Letter, Exhibit 1 at 21; see CA-T-3 at 44-46.

101. In response to the Consumer Advocate's direct testimony and during settlement discussions, the Company disagreed with the Consumer Advocate's recommendation that the rate increase granted in this proceeding not be factored up by 0.06% for increases in uncollectible expenses for the following reasons. First, MECO believed that there is and will continue to be a linear relationship between revenues and uncollectible expenses because as electric sales revenues increase for MECO due to the proposed rate increase, the corresponding amount of uncollectible dollars can be expected to increase proportionately. See MECO T-7 at 28. Second, allowing the rate increase granted to be factored up by 0.06% for increases in

uncollectible expenses is consistent with such adjustment allowed at proposed rates in HELCO's most recent rate case (i.e., Interim Decision and Order No. 23342, dated April 4, 2007 Docket No. 05-0315 ("Interim D&O 23342")).[17] Third, its "uncollectible factor" factor of 0.06% is reasonable, as it was based on the latest recorded year actual write-offs at the time of the Application and direct testimonies were filed (i.e., calendar year-end 2005 recorded net write-off of 0.0546% rounded, which was used in direct testimony; the calendar year-end 2006 recorded net write off was 0.06%),[18] which is also akin to the methodology used by HELCO in Docket No. 05-0135, but different from the historical 10-year average methodology used in HECO's most recent rate case (Docket No. 2006-0386). The 0.06% factor is near the lowest amount in comparison to the past five years which ranged from a high in December 2001 of 0.11.72% to a low of 0.0546% in December 2005. See MECO T-7 at 29. Further, in response to CA-IR-353.b, the Company stated that it anticipates that uncollectible write-offs may be higher than the test year estimate, if write-offs continue at the rate recorded through July 2007.[19] Finally, the "Percentage of Sales Revenue" methodology for both present and proposed rates has been accepted by the Commission in several previous rate case proceedings. See Interim Decision and Order No. 22050 in Docket No. 04-0113, dated September 27, 2005 ("Interim D&O 22050"), for HECO's 2005 test year; Decision and Order No. 14412, dated December 11, 1995, in Docket No. 7766 for HECO's 1995 test year; and Decision and Order No. 16922, dated April 6, 1999, in Docket No. 97-0346, for MECO's 1999 test year. Stipulated Settlement Letter, Exhibit 1 at 21-22.

102. During the settlement discussions and in recognition of the fact that the

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[17] Such a factor up was not allowed in the Stipulation resolving HECO Docket No. 2006-0386 and will be reviewed by the Consumer Advocate on a case-by-case basis in future proceedings.

[18] The calendar year-end 2006 recorded net write-off percentage was provided in the response CA-IR-138, Attachment A.

[19] YTD July 2007 cumulative write-offs = $139,756 times 12/7 = $239,582.

consolidated write-off factor has been relatively low and stable since 2004, the Consumer Advocate accepted the Company's proposal to use the 0.06% write-off factor at proposed rates in this Docket. Thus, for purposes of settlement, the Parties agreed on the 0.06% uncollectible factor proposed by MECO multiplied against electric sales revenue at proposed rates to determine the allowance for uncollectible accounts at proposed rates. Based on the foregoing, the Parties agreed with the consolidated test year allowance for uncollectible accounts expense estimate of $214,000 and $222,000 at present and proposed rates, respectively, based on the application of the 0.06% uncollectible factor to electric sales revenues. The $222,000 of uncollectibles consists of $206,000 for the Maui Division, $7,000 for the Lanai Division and $9,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 22.

c.

Customer Service Expense

103. Customer Service expenses represent costs incurred by the Company to perform activities that are primarily related to responding to customer requests and inquiries, and providing educational information on, among other things, energy conservation, renewable energy, and electrical safety. Included in customer service expense are (1) labor and non-labor costs for the Company's Administration Department and the Administration, Commercial Services and integrated resource planning ("IRP") Divisions of the Customer Service Department to provide information and assistance toward encouraging safe, efficient, and economical use of the company's electric services, and (2) labor and non-labor costs for IRP that were previously incremental costs recovered through the IRP Cost Recovery Provision and are now proposed by MECO to be recovered through base rates. Stipulated Settlement Letter, Exhibit 1 at 22; see MECO T-8 at 2-3.

104. The test year customer service expense proposed by MECO in its direct testimony and June 2007 Update and the test year estimate proposed by the Consumer Advocate in its direct testimony are as follows:

Customer Service	MECO Direct [A]	MECO Update [B]	Consumer Advocate Direct [C]
Maui Division	$1,538,000	$1,740,000	$1,161,035
Lanai Division	$1,000	$1,000	$1,000
Molokai Division	$2,000	$2,000	$2,000
Total Company	$1,541,000	$1,743,000	$1,164,035

References:
A – MECO-801
B – June 2007 Update, MECO T-8, filed 7/12/07; Update Attachment A at 1-3.
C – CA-102, Schedule C at 1; CA-103, Schedule C at 1; CA-104, Schedule C at 1; CA-101, Schedule C at 1 for the Maui, Lanai, Molokai and Consolidated operations, respectively.

Stipulated Settlement Letter, Exhibit 1 at 22-23.

105. The difference between the Company's and the Consumer Advocate's projections are due to the following four adjustments proposed by the Consumer Advocate:

(1) an adjustment to reclassify MECO's projected demand-side management ("DSM") labor and related on-costs labor overheads from base rates and instead continue to recover such costs in the IRP surcharge (see CA-102, Schedule C-9; CA-102, Schedule C at 2);

(2) an adjustment to reduce MECO's projected IRP non-labor expenses (see CA-102, Schedule C-10; CA-102, Schedule C at 3);

(3) an adjustment to reduce the allocation from HECO RA "PNG" for marketing support expenses that are projected to be incurred on behalf of MECO (see CA-102, Schedule C-11; CA-102, Schedule C at 3); and

(4) an adjustment to reduce MECO's projected customer service labor costs (see CA-101, Schedule C-13; CA-102, Schedule C at 3).

Stipulated Settlement Letter, Exhibit 1 at 23.

106. As a result of the settlement discussions, the Parties have reached agreement on all four adjustments, as described in greater detail below. The result is a test year 2007 customer service expense projection as follows:

Customer Service Expense	Agreement of Parties
Maui Division	$1,312,586
Lanai Division	$1,000
Molokai Division	$2,000
Total Company	$1,315,586

Stipulated Settlement Letter, Exhibit 1 at 23.

107. DSM Employee Reclassification Adjustment. In the June 2007 Update for MECO T-8, MECO increased customer service labor cost for the Maui Division by $202,000 to reflect the labor costs of three MECO employees (i.e., an Energy Efficiency Program Manager-Commercial & Industrial, an Energy Efficiency Program Manager-Residential and a Clerk Typist III-DSM). See June 2007 Update, MECO T-8, and Update Attachment A at 1-3. The inclusion of the labor costs for these three employees in the test year revenue requirement also required adjustments for certain on-costs (i.e., the administrative expenses and employee benefit expenses transferred to capital and other accounts reflected in NARUC account nos. 922 (MECO expense element 406) and 926 (MECO expense element 422), respectively, and the projected test year payroll taxes). See June 2007 Update, MECO T-8. MECO's proposal to include the labor and labor related costs for these employees in base rates resulted from Decision and Order No. 23258 ("D&O 23258") in Docket No. 05-0069, wherein the Commission stated that "labor costs shall be recovered through base rates and all other DSM-related utility-incurred costs shall be

recovered through a surcharge." Stipulated Settlement Letter, Exhibit 1 at 23-24; see D&O 23258 at 51.

108. In its direct testimony, the Consumer Advocate proposed a $319,000 reduction for the Maui Division (see CA-102, Schedule C at 2; CA-102, Schedule C-9) to remove the test year proposed level of DSM program labor and labor related on-costs of the three positions from base rates and instead have these costs recovered through the IRP surcharge. CA-102, Schedule C-9 reflects that the $319,000 was comprised of $201,850 for direct labor to the Customer Service Expense, $101,967 for employee benefits and overheads and $15,183 for payroll taxes. In support of its recommendation, the Consumer Advocate contended that without the proposed reclassification of the DSM labor and related expenses to be recovered in the IRP surcharge, there is no ability to remove the DSM program costs that are embedded in base rates absent a utility rate case, once responsibility for DSM program administration is transferred from the utility to a third-party administrator. Stipulated Settlement Letter, Exhibit 1 at 24; see CA-T-3 at 53-55.

109. The Company accepts the Consumer Advocate's recommendation for purposes of settlement and agrees to remove the labor and related on-costs associated with these three employees from the test year revenue requirement and instead recover these costs through the IRP surcharge. In addition, if the Company continues to incur labor costs for the management of the energy efficiency programs after the transition to a non-utility market structure (expected to occur in or about January 2009) MECO should be able to continue recovering such costs through the DSM component of the IRP cost recovery provision ("DSM Surcharge"). This recovery is to compensate MECO for the actual expenses incurred as a result of such market structure. For example, MECO may be required to collect the public benefits charge through the existing IRP

Surcharge, and thus may be required to incur costs to administer the public benefits fund or to ensure a smooth transition to a non-utility structure, as required by Order No. 23681, Docket No. 2007-0323. Stipulated Settlement Letter, Exhibit 1 at 24.

110. Based on the above, MECO and the Consumer Advocate agree to reduce the costs of the Customer Service labor expenses for the Maui Division by $202,000 and making appropriate adjustments to the associated overhead costs to the appropriate accounts for the Maui Division: $23,500 to administrative expenses transferred, $78,500 to employee benefits transferred; and $15,000 to payroll taxes, as further discussed herein. Stipulated Settlement Letter, Exhibit 1 at 24; see June 2007 Update, MECO T-8, and Update Attachment A.

111. IRP Non-Labor Expense Adjustment. In direct testimony, MECO included $696,000 in its Maui Division test year estimate for non-labor IRP costs See MECO-812; MECO-WP-812. This amount reflected a three-year average of actual 2005, part actual and part forecast 2006 (i.e., January to July actual and August to December forecast) and forecast 2007 (MECO-812) expenses, consistent with the methodology used to derive the normalized IRP general planning costs to be recovered in base rates.[20] Stipulated Settlement Letter, Exhibit 1 at 25.

112. In its direct testimony, the Consumer Advocate accepted the three-year averaging approach that had been accepted by the Commission (see response to CA-IR-411.e), but proposed to calculate the three-year average based on the actual 2005, 2006 and assumed ratable

[20] See Docket No. 99-0207, HELCO 2000 Test Year Rate Case, Decision and Order No. 18365, filed on February 8, 2001 at 19-21, for the source documents, calculations and references related to the determination of the IRP costs to be included in base rates. See Docket No. 04-0113, HECO 2005 test year rate case – Stipulated Settlement Letter, filed on September 16, 2005, Exhibit II at 6, and HECO-1029, for the source documents and calculations used to determine the IRP costs to be included in base rates in Interim Decision and Order No. 22050. See Docket No. 05-0315 Interim Decision and Order No. 23342, HELCO 2006 test year rate case, filed on April 4, 2007, Exhibit A at 1, Customer Service Expense, and HELCO T-8 at 16-17, and HELCO RT-8 at 6, for the source documents and calculations used to determine the IRP costs to be included in base rates in the latest HELCO rate case, Docket No. 05-0315.

continued spending in 2007, based on actual year-to-date August 2007 spending by MECO. See CA-T-3 at 58. The three-year average expense proposed by the Consumer Advocate is $497,627 (see CA-102, Schedule C-10), which results in a proposed reduction of $198,217 to MECO's projected non-labor IRP planning costs for the 2007 test year revenue requirement. Stipulated Settlement Letter, Exhibit 1 at 25; see CA-102, Schedule C-10; CA-102, Schedule C at 3.

113. During the settlement discussion, MECO agreed to the methodology used by the Consumer Advocate, but recommended that the computation take into consideration the updated forecast for the remaining months in 2007, as reflected in MECO's response to CA-IR-362, Attachment A (updated September 27, 2007). This updated forecast was derived by MECO after reviewing each line item and estimating the cost for known activities that are expected to be incurred for the rest of the year including studies related to IRP planning best practices, and long-term peak forecasting. MECO thus proposed that the test year IRP general planning costs be $532,029, which is $164,000 ($163,815 rounded up) lower than the Company's original test year estimate of $696,000 for the Maui Division. Stipulated Settlement Letter, Exhibit 1 at 25; see Stipulated Settlement Letter, MECO T-8, Attachment 1.

114. For purposes of settlement, the Consumer Advocate agreed to MECO's settlement proposal. As a result, the Parties agree to reflect $532,029 of IRP general planning costs in the test year revenue requirement. Stipulated Settlement Letter, Exhibit 1 at 25.

115. HECO PNG Marketing Support Adjustment. In direct testimony, MECO included $47,531 in its 2007 test year Maui Division estimate to reflect the intercompany charges from HECO (RA PNG) for marketing support provided on MECO's behalf. Stipulated Settlement Letter, Exhibit 1 at 26; see response to CA-IR-2 for MECO T-8, Attachment B at 11.

116. In its written testimony, the Consumer Advocate expressed a concern with the

reasonableness of MECO's projection, noting that the amount is significantly higher than the actual charges that were incurred in each of the past three years. See CA-T-3 at 59. As a result, the Consumer Advocate proposed an adjustment of $28,476, to reflect $19,055 in the test year customer service projection. The Consumer Advocate's recommendation was based on the three-year average of the actual allocation for the years 2004, 2005 and 2006. Stipulated Settlement Letter, Exhibit 1 at 26; see CA-102, Schedule C-11; CA-102, Schedule C at 3.

117. For purposes of settlement, the Company agrees to reduce the test year estimate of intercompany charges from HECO's PNG RA for marketing support by $28,000 (i.e., $28,476 rounded). Stipulated Settlement Letter, Exhibit 1 at 26.

118. Payroll Expense Adjustment. For reasons discussed above, the Consumer Advocate proposed a MECO consolidated (and Maui Division) Customer Service labor expense adjustment of $33,272, based on the simple average of the Company's actual beginning and forecasted end of year Customer Service employee count (i.e., December 31, 2006 and December 31, 2007, respectively). For purposes of settlement, MECO agrees to accept the Consumer Advocate's adjustment. Stipulated Settlement Letter, Exhibit 1 at 26; see Stipulated Settlement Letter, MECO T-11, Attachments 3 and 3(D).

4.

Administrative and General Expenses

119. A&G expenses represent a diverse group of expenses under the NARUC Uniform System of Accounts ("USOA"), which the Commission has directed MECO to follow. MECO T-9 at 4. Test year A&G O&M expense for consolidated MECO was estimated to be $13,559,700 in direct testimony (see MECO-901 at 20), which was comprised of $12,549,600 for the Maui Division, $343,700 for the Lanai Division, and $666,400 for the Molokai Division

(see MECO-901 at 5, 10 and 15, respectively). The direct testimony estimate was increased by $322,200 to an updated total of $13,881,900 in the Company's June 2007 Update for MECO T-9, which was comprised of $12,855,100 for the Maui Division, $350,300 for the Lanai Division and $676,500 for the Molokai Division (see Attachment 1 of the Update at 20, 5, 10 and 15, respectively, filed on July 10, 2007). Stipulated Settlement Letter, Exhibit 1 at 26-27.

120. In its written testimony, the Consumer Advocate recommended a test year expense estimate of $13,400,601 (CA-101, Schedule C at 1) for consolidated MECO, resulting in a reduction of $481,299 to the Company's June 2007 Update estimate (a reduction of $159,099 from the Company's direct testimony estimate). Stipulated Settlement Letter, Exhibit 1 at 27.

121. The test year A&G O&M expenses proposed by MECO in its direct testimony and June 2007 Update and the test year estimate proposed by the Consumer Advocate in its direct testimony are as follows:

A&G O&M	MECO Direct [A]	MECO Update [B]	Consumer Advocate Direct [C]
Maui Division	$12,549,600	$12,855,100	$12,397,704
Lanai Division	$343,700	$350,300	$341,026
Molokai Division	$666,400	$676,500	$661,871
Total Company	$13,559,700	$13,881,900	$13,400,601

References:

A – MECO-901 at 5, 10, 15, and 20, for Maui, Lanai, Molokai and MECO consolidated, respectively.
B – June 2007 Update, MECO T-9, filed 7/10/07; Update Attachment 1 at 5, 10, 15, and 20, for Maui, Lanai, Molokai and MECO consolidated, respectively.
C – CA-102, Schedule C at 1; CA-103, Schedule C at 1; CA-104, Schedule C at 1; CA-101, Schedule C at 1 for the Maui, Lanai, Molokai and Consolidated operations, respectively.

Stipulated Settlement Letter, Exhibit 1 at 27.

122. The difference between the Parties resulted from the following six adjustments

proposed by the Consumer Advocate:

(1) an adjustment to remove the labor costs associated with new employee positions that have not been filled for the entire 2007 test year (see CA-T-1 at 67-79; CA-101, Schedule C at 3; CA-101, Schedule C-13);

(2) an adjustment to reduce MECO's projected employee benefits expense to correspond with the Consumer Advocate's recommended labor cost adjustments as discussed above (see CA-101, Schedule C at 3; CA-101, Schedule C-14);

(3) an adjustment to remove the Company's pension asset amortization (see CA-101, Schedule C at 3; CA-101, Schedule C-16);

(4) an adjustment to normalize the non-EPRI research and development expense that is included in MECO's test year expense projection (see CA-101, Schedule C at 3; CA-101, Schedule C-17);

(5) an adjustment to remove a software amortization that is expiring in September 2007 (see CA-101, Schedule C at 4; CA-101, Schedule C-18); and

(6) an adjustment to normalize the Ho'omaika'i award costs (see CA-101, Schedule C at 4; CA-101, Schedule C-20).

Stipulated Settlement Letter, Exhibit 1 at 27-28.

123. For purposes of settlement, MECO and the Consumer Advocate have reached agreement on all six adjustments, as described in greater detail below. The result is a test year estimate of $13,306,347 for MECO consolidated, which is comprised of $12,303,194 for the Maui Division, $341,176 for the Lanai Division and $661,977 for the Molokai Division. The agreed upon test year estimate is $575,553 less than MECO's June 2007 Update estimate and also reflects the removal of corporate administration and employee benefits expenses associated

with the reclassification of the DSM Program expenses for the three Customer Service employees whose labor costs are to be recovered through the IRP surcharge, as opposed to base rates, as discussed above. The test year estimate for A&G O&M expense based on the agreement of the parties is summarized as follows:

A&G O&M Expense	Agreement of Parties
Maui Division	$12,303,194
Lanai Division	$341,176
Molokai Division	$661,977
Total Company	$13,306,347

Stipulated Settlement Letter, Exhibit 1 at 28.

124. Employee Count Adjustment. In CA-T-1 (CA-101, Schedule C-13), the Consumer Advocate initially proposed a consolidated A&G O&M labor expense adjustment of $5,041 based on the same methodology and rationale for the proposed payroll adjustments to the other functional expenses (CA-101, Schedule C-13) – i.e., the simple average of the Company's actual A&G employee count at the beginning of the year and the end of year estimate (i.e., December 31, 2006 and December 31, 2007, respectively). During the settlement discussions, the Company represented that in the first six months of 2007, it incurred unbudgeted overtime for RAs "MDK" and "MDR" and proposed reducing the Consumer Advocate's MECO consolidated (and Maui Division) A&G labor expense adjustment by $3,113. See the Payroll Expense Adjustment section for T&D above. After reviewing the information the Consumer Advocate agreed to revise its MECO consolidated (and Maui Division) adjustment to $1,928. See Stipulated Settlement Letter Attachment MECO T-11, Attachments 3 and 3(E). For purposes of settlement, MECO accepts the Consumer Advocate's revised adjustment. Stipulated Settlement Letter, Exhibit 1 at 28.

125. Ho'omaika'i Award Costs. MECO included $93,650 for total MECO in its direct

testimony test year estimate for A&G direct non-labor, account no. 920, for Ho'omaika'i Award costs. MECO T-9 response to CA-IR-2, Attachment C. In the June 2007 Update, the Company reduced its test year estimate for Ho'omaika'i Award costs by $36,900 to remove the costs associated with the terminated Ho'okina Program. See June 2007 Update, MECO T-9 at 1. As a result of the adjustment made in the June 2007 Update, the Company's test year estimate for Ho'omaika'i Award costs was reduced from $93,650 to a consolidated $56,750 ($93,650 - $36,900 = $56,750), which was comprised of $52,636 for the Maui Division, $1,390 for the Lanai Division and $2,724 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 28-29.

126. The Consumer Advocate noted that MECO did not meet all safety goals in 2004 and 2006. See CA-T-1 at 103. Consequently, the Consumer Advocate proposed a further adjustment of $24,489 based on a normalized four-year average of award costs recorded for 2004-2006 and forecast for 2007. Stipulated Settlement Letter, Exhibit 1 at 29; see CA-T-1 at 103; CA-101, Schedule C-20.

127. For purposes of settlement, the Company accepts the Consumer Advocate's proposed $24,489 consolidated reduction to test year Ho'omaika'i award costs, which is comprised of $22,714 for the Maui Division, $600 for the Lanai Division and $1,175 for the Molokai Division. See CA-101, Schedule C-20 at 1; CA-102, Schedule C-20 at 1; CA-103, Schedule C-20 at 1; CA-104, Schedule C-20 at 1. The adjustment results in a normalized test year estimate of $32,261 for consolidated Ho'omaika'i award costs, which is comprised of $29,922 for the Maui Division, $790 for the Lanai Division and $1,549 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 29.

128. DSM Employee Reclassification – Corporate Administration Overheads. As discussed above, the Consumer Advocate proposed an adjustment to reverse the recovery of the labor costs for three employees from base rates to the IRP Surcharge. See CA-T-3 at 53-55. Consistent with the Parties' agreement regarding the "DSM Employee Reclassification Adjustment" in the Customer Services section above, the Parties agree to the aforementioned adjustment to reduce the test year estimate for account no. 922 (administrative expenses transferred) by a consolidated $23,521 comprised of $23,521 for Maui, $0 for Lanai, and $0 for Molokai, for the purpose of reaching a global settlement in this proceeding. Stipulated Settlement Letter, Exhibit 1 at 29.

129. Expiring Software Amortization. MECO included $61,066 for total MECO in its direct testimony test year estimate for account no. 923.03 (outside services – associated companies), for Ellipse maintenance expense (MECO T-9 response to CA-IR-2, Attachment B), which was comprised of $56,639 for the Maui Division, $1,496 for the Lanai Division, and $2,931 for the Molokai Division. The Company's $61,066 test year estimate for Ellipse maintenance expense included $23,202 for the amortization of software licensing fees which the Company confirmed, in its response to CA-IR-371.a, was to expire in September 2007. Based on this representation, the Consumer Advocate maintained that "[i]t is necessary and appropriate to remove this amortization expense that will not continue beyond September 30, 2007". See CA-T-1 at 91; CA-101, Schedule C-18. As a result, in its direct testimony, the Consumer Advocate recommended an adjustment to remove the expiring amortization of software expenses amounting to $23,202 on a consolidated company basis, included by MECO in account no. 923.03. Stipulated Settlement Letter, Exhibit 1 at 29-30.

130. For purposes of settlement, the Company accepts the Consumer Advocate's

proposal to remove $23,202 for the expiring amortization of software licensing fees from the test year expenses, resulting in a normalized consolidated test year estimate of $37,864 ($61,066 - $23,202 = $37,864) for Ellipse maintenance expense, which is comprised of $35,119 for the Maui Division, $928 for the Lanai Division and $1,817 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 30; CA-101, Schedule C-18.

131. Employee Count Adjustment. In CA-101, Schedule C-14, the Consumer Advocate calculated the reduction of MECO's revised forecast of employee benefit expenses to reflect the labor cost adjustment associated with the employee count reduction proposals based on the average test year concept (11.5 employees as shown on CA-101, Schedule C-14, as reflected in CA-WP-101-C14 at 1). Based on the estimated net headcount reduction, the Consumer Advocate's proposed consolidated reduction for the associated employee benefits expense was $56,392. Stipulated Settlement Letter, Exhibit 1 at 30; CA-101, Schedule C at 3, and Schedule C-14.

132. Based on the settlement reached with regard to the average number of employees for the 2007 test year revenue requirement calculation, the Parties agree to reduce the net headcount reduction by one employee (0.5 for MGD and 0.5 for MDE) to 10.5 employees. As a result, the Parties also agree to a reduction of $4,699 to the Consumer Advocate's consolidated adjustment to employee benefits, resulting in a consolidated $51,693 reduction in employee benefits expense consisting of $48,103 for the Maui Division, $1,356 for the Lanai Division, and $2,234 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 30; see Stipulated Settlement Letter, MECO T-11, Attachment 3(F).

133. DSM Employee Reclassification – Employee Benefits. MECO's estimate for employee benefits expenses is reduced by $78,446 net of amounts transferred (June 2007

Update, MECO T-9, Attachment 1 at 24, 41), comprised of $78,446 for the Maui Division, $0 for the Lanai Division and $0 for the Molokai Division, to reflect the reclassification of DSM Program expenses for the three Customer Service employees removed from base rates (to be recovered through the IRP Clause). The Parties agree to this reduction. Stipulated Settlement Letter, Exhibit 1 at 30

134. Pension Asset Amortization. In the June 2007 Update for MECO T-9, the Company proposed to update its pension estimates to reflect a pension tracking mechanism, similar to the pension tracking mechanism that was agreed to by HELCO and the Consumer Advocate in the HELCO 2006 test year rate case (Docket No. 05-0315) and approved by the Commission on an interim basis in Interim D&O 23342. To include the estimated amortization of the pension asset balance as of December 31, 2007 (see June 2007 Update MECO T-9 at 3 and Update Attachment 5 at 1), as specified in its proposed pension tracking mechanism, MECO increased its consolidated test year 2007 estimate for account no. 926000 by $241,800, comprised of $225,200 for the Maui Division, $6,600 for the Lanai Division and $10,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 30-31.

135. The Consumer Advocate recommended against including MECO's estimated pension asset in rate base and, therefore, the amortization of such asset in the test year expense. Stipulated Settlement Letter, Exhibit 1 at 31; see CA-T-1 at 21, 22, 59-61.

136. Based on the settlement reached with regard to the ratemaking treatment of the pension asset, amortization of the pension asset and implementation of the pension tracking mechanism, the Parties agree to exclude the amortization of the test year ending pension amount and to modify the proposed pension tracking mechanism. Stipulated Settlement Letter, Exhibit 1 at 31.

137. Non-EPRI Research and Development Expense. In its direct testimony, MECO included a consolidated \$255,379 test year estimate for account no. 930.2 (miscellaneous general expenses), for non-EPRI research and development costs (MECO-918), which was comprised of \$255,379 for the Maui Division, \$0 for the Lanai Division and \$0 for the Molokai Division. The Company's test year estimate was based on specific projects and programs identified in MECO-918. In its direct testimony, the Consumer Advocate recommended an adjustment to normalize the consolidated \$255,379 test year estimate MECO proposed for non-EPRI research and development costs. MECO-918. The Consumer Advocate's recommendation was based on a three-year average, including recorded costs for 2005 and 2006 and MECO's updated 2007 test year estimate. CA-T-1 at 81-82; CA-101, Schedule C-17. The resulting test year expense proposed by the Consumer Advocate was \$125,005, based on an adjustment in the amount of \$130,374. Stipulated Settlement Letter, Exhibit 1 at 31; see CA-101, Schedule C-17.

138. For purposes of settlement, MECO accepts the Consumer Advocate's proposal to reduce the test year estimate for non-EPRI research and development expense in account no. 930.2 by \$130,374 to a consolidated test year estimate of \$125,005, which is comprised of \$125,005 for the Maui Division, \$0 for the Lanai Division and \$0 for the Molokai Division. In addition, MECO accepts the Consumer Advocate's proposal to require MECO to provide a full and complete accounting of its research and development costs in its next rate case filing. Stipulated Settlement Letter, Exhibit 1 at 31; CA-T-1 at 88-89.

5.

Depreciation and Amortization

139. Depreciation expense represents the expiration or consumption, in whole or in part, of the service life, capacity, or utility of property used in the provision of the regulated

service. The test year depreciation and amortization expense estimates were calculated by first determining the estimated test year depreciation accrual and then adjusting for vehicle depreciation, Contribution in Aid of Construction amortization, Federal investment tax credit amortization, and the amortization of net regulatory assets and liabilities related to Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes. Stipulated Settlement Letter, Exhibit 1 at 32.

140. The Company's test year consolidated estimate of depreciation expense submitted in direct testimony, which was based on estimated depreciable utility plant balances as of January 1, 2007, was $28,872,000, including $26,597,000 for the Maui Division, $1,244,000 for the Lanai Division, and $1,031,000 for the Molokai Division. See MECO-1201. The Company's test year estimate of the test year consolidated average accumulated depreciation submitted in direct testimony was $354,353,000, including $323,681,000 for the Maui Division, $14,315,000 for the Lanai Division, and $16,357,000 for the Molokai Division. See MECO-1202 at 1-2; Stipulated Settlement Letter, Exhibit 1 at 32.

141. With the update of the beginning of test year rate base with actual plant additions in 2006, test year consolidated depreciation expense was reduced by $859,000 to $28,011,000, including $25,619,000 for the Maui Division, $1,264,000 for the Lanai Division, and $1,128,000 for the Molokai Division. See June 2007 Update, MECO T-12 at 4, filed July 3, 2007. The updated estimate of the test year consolidated average accumulated depreciation increased by $106,000 from $354,353,000 to $354,459,000, including $323,775,000 for the Maui Division, $14,295,000 for the Lanai Division, and $16,389,000 for the Molokai Division (see June 2007 Update, MECO T-12 at 5-6; MECO-1202) due to the inclusion of 2006 recorded data, lower estimated 2007 depreciation accrual, and higher estimated 2007 property retirements and salvage

values. See June 2007 Update, MECO T-12 at 2-3; Stipulated Settlement Letter, Exhibit 1 at 32.

142. In its direct testimony, the Consumer Advocate did not recommend any adjustments to the Company's test year estimates for depreciation and amortization expense and the average accumulated depreciation balances reflected in the 2007 test year rate base. Stipulated Settlement Letter, Exhibit 1 at 32.

143. As a result, the Parties agree to a test year estimate for depreciation and amortization expense of $28,011,000 for consolidated MECO, which is comprised of $25,619,000 for the Maui Division, $1,264,000 for the Lanai Division, and $1,128,000 for the Molokai Division. In addition, the Parties agree to a test year estimate for average accumulated depreciation for consolidated MECO of $354,459,000, which is comprised of $323,775,000 for the Maui Division, $14,295,000 for the Lanai Division, and $16,389,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 32.

6.

Taxes

a.

Taxes Other than Income Taxes

144. Taxes other than income taxes ("TOTIT") are taxes related either to utility revenue or to payroll. The taxes related to utility revenue include the State Public Service Company ("PSC") tax, the State Public Utility fee and the County Franchise Royalty tax. The taxes related to payroll include the Federal Insurance Contribution Act and Medicare ("FICA/Medicare") taxes, the Federal Unemployment ("FUTA") tax and the State Unemployment ("SUTA") tax. Stipulated Settlement Letter, Exhibit 1 at 33.

145. In MECO's direct testimony, the Company proposed a consolidated 2007 test

year estimate for TOTIT of $33,068,000 at present rates and $34,748,000 at proposed rates, as follows:

	Taxes Other Than Income Taxes Direct Testimony		
	At Present Rates	At Proposed Rates	Source
Maui Division	$30,918,000	$32,490,000	MECO-1301
Lanai Division	$952,000	$1,000,000	MECO-1301
Molokai Division	$1,198,000	$1,258,000	MECO-1301
Total Company	$33,068,000	$34,748,000	MECO-1301

Stipulated Settlement Letter, Exhibit 1 at 33; MECO T-13 at 2; MECO-1301.

146. In its June 2007 Update for MECO T-13, filed on August 24, 2007, the Company updated its test year estimate for payroll taxes for the Maui Division, resulting in a reduction of $16,000 to the consolidated TOTIT projection as follows:

	Taxes Other Than Income Taxes June 2007 T-13 Update		
	At Present Rates	At Proposed Rates	Source
Maui Division	$30,902,000	$32,474,000	June Update, page 1
Lanai Division	$952,000	$1,000,000	June Update, page 1
Molokai Division	$1,198,000	$1,258,000	June Update, page 1
Total Company	$33,052,000	$34,732,000	June Update, page 1

Stipulated Settlement Letter, Exhibit 1 at 33.

147. In its direct testimony, the Consumer Advocate recommended a consolidated test year estimate for Taxes Other Than Income Taxes of $33,002,000 (CA-101, Schedule C at 1), resulting in a proposed decrease of $50,000 to the Company's June 2007 Update estimate (a reduction of $66,000 from the Company's direct testimony estimate). The two adjustments proposed by the Consumer Advocate were as follows:

(1) an adjustment to reduce the estimated revenue taxes related to ECAC revenue adjustment (CA-101, Schedule C at 2; CA-101, Schedule C-3); and

(2) an adjustment to reduce the estimated payroll taxes related to average staffing adjustments proposed by the Consumer Advocate as discussed above. (CA-101, Schedule C at 3; CA-101, Schedule C-15).

Stipulated Settlement Letter, Exhibit 1 at 33.

148. Based on the Parties' settlement of the ECAC revenues, as discussed above, and the settlement reached on the test year labor costs, the Parties agree to a revised TOTIT consolidated test year estimate of $33,008,000 and $34,178,000 at present and proposed rates, respectively, as shown below:

	Taxes Other Than Income Taxes Settlement Test Year Estimates	
	At Present Rates	At Proposed Rates
Maui Division	$30,863,000	$31,763,000
Lanai Division	$949,000	$1,116,000
Molokai Division	$1,196,000	$1,299,000
Total Company	$33,008,000	$34,178,000

Stipulated Settlement Letter, Exhibit 1 at 34; Statement of Probable Entitlement, Exhibits 1-4.

149. <u>Revenue Taxes</u>. In its direct testimony, MECO included $31,690,000 of consolidated revenue taxes in the 2007 test year at present rates, and $33,370,000 at proposed rates, as follows:

	Revenue Taxes Direct Testimony		
	At Present Rates	At Proposed Rates	Source
Maui Division	$29,665,000	$31,237,000	MECO-1301
Lanai Division	$896,000	$944,000	MECO-1301
Molokai Division	$1,129,000	$1,189,000	MECO-1301
Total Company	$31,690,000	$33,370,000	MECO-1301

Stipulated Settlement Letter, Exhibit 1 at 34.

150. There was no update to the Company's test year revenue tax estimate included in the MECO T-13 June 2007 Update. Stipulated Settlement Letter, Exhibit 1 at 34.

151. In its direct testimony, the Consumer Advocate recommended a reduction to MECO's consolidated test year estimate for revenue taxes of $13,998 (CA-101, Schedule C at 2; CA-101, Schedule C-3) to correspond with the proposed adjustment to fuel and purchased energy expenses, which affects the test year ECAC revenues. See CA-T-3 at 10-11.

152. As explained below, the Parties agreed on the test year ECAC revenues, which results in the following test year revenue tax projections:

	Revenue Taxes Settlement Test Year Estimates	
	At Present Rates	At Proposed Rates
Maui Division	$29,664,000	$30,564,000
Lanai Division	$896,000	$1,063,000
Molokai Division	$1,129,000	$1,232,000
Total Company	$31,689,000	$32,859,000

Stipulated Settlement Letter, Exhibit 1 at 34-35; Statement of Probable Entitlement, Exhibits 1-4 at 6.

153. Payroll Taxes. In its direct testimony, MECO included $1,378,000 of consolidated payroll taxes chargeable to O&M expenses in the 2007 test year, which was comprised of $1,253,000 for the Maui Division, $56,000 for the Lanai Division and $69,000 for the Molokai Division. MECO-1301. The payroll taxes are based on the tax rates set forth by the Federal and State government applied to the compensation base that is subject to such tax. In its June 2007 Update, the Company updated its test year consolidated payroll tax estimate to $1,362,000, which was comprised of $1,237,000 for the Maui Division, $56,000 for the Lanai Division and $69,000 for the Molokai Division. June 2007 Update, MECO T-13 at 1, and Attachment 1 at 1. The updated estimate reflected (1) an update of labor costs, which affected payroll tax expense; (2) an updated SUTA tax rate and (3) an updated SUTA maximum wage base and resulted in a $16,000 net decrease to consolidated test year expenses ($1,378,000-

$1,362,000=$16,000), all to the Maui Division. Stipulated Settlement Letter, Exhibit 1 at 35.

154. In its direct testimony, the Consumer Advocate recommended reducing payroll taxes by $35,710, to be consistent with the Consumer Advocate's recommended payroll expense adjustments discussed above. CA-101, Schedule C-15. In addition, the Consumer Advocate recommended a payroll tax reduction of $15,183 due to the reclassification of DSM program labor costs from base rates to the IRP surcharge cost recovery mechanism. Stipulated Settlement Letter, Exhibit 1 at 35; see CA-102, Schedule C-9.

155. As discussed above, the Parties have reached agreement on the labor costs to be included in the 2007 test year revenue requirement for each division. Thus, the Company and the Consumer Advocate also agree on the test year payroll expense of $1,319,000, which is comprised of $1,199,000 for the Maui Division, $53,000 for the Lanai Division and $67,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 35; Stipulated Settlement Letter, MECO T-13, Attachment 2.

b.

Income Taxes

156. In its direct testimony, the Company proposed a consolidated 2007 test year estimate for Income Taxes of $9,071,000 at present rates and $15,797,000 at proposed rates, as follows:

	Income Taxes Direct Testimony		
	At Present Rates	At Proposed Rates	Source
Maui Division	$9,122,000	$15,415,000	MECO-1302
Lanai Division	-$175,000	$16,000	MECO-1302
Molokai Division	$124,000	$366,000	MECO-1302
Total Company	$9,071,000	$15,797,000	MECO-1302

Stipulated Settlement Letter, Exhibit 1 at 35-36, see MECO T-13 at 7.

157. In its June 2007 Update for MECO T-13, the Company indicated that its estimate of income taxes for the test year will be revised for revisions to the interest expense adjustment to reflect the revised 2007 test year estimate of AFUDC (see June 2007 update of MECO-WP-102) and revisions to the test year estimates of revenues and expenses at present rates and at proposed rates. Stipulated Settlement Letter, Exhibit 1 at 36; MECO T-13, June 2007 Update at 1.

158. In its direct testimony, the Consumer Advocate's estimate of income taxes for the test year was $9,883,000 (CA-101, Schedule C at 1), which was $812,000 more than the Company's estimate at present rates. MECO and the Consumer Advocate used the same tax rates and methodology to compute the test year income tax expense. The difference between the Parties' estimates of income tax expense resulted primarily from the differing revenue and expense estimates, as discussed above, that contribute to higher taxable income in the Consumer Advocate's calculation. In addition, the Consumer Advocate recommended that MECO's estimated Domestic Production Activities Deduction ("DPAD") for test year 2007 be fixed at $1,127,000, resulting in a fixed estimated federal tax effect of $394,000. Stipulated Settlement Letter, Exhibit 1 at 36.

159. During the settlement discussions, the Parties resolved this issue as explained below. Based on the resolution of this issue and the settlement reached on the test year revenues and O&M expense projections as described herein, the Parties agree for purposes of settlement to a revised consolidated Income Tax expense estimate for the 2007 test year of $9,586,000 at present rates and $14,273,000 at proposed rates, as follows:

	Income Taxes Settlement Test Year Estimates	
	At Present Rates	At Proposed Rates
Maui Division	$9,672,000	$13,282,000

Lanai Division	-$184,000	$483,000
Molokai Division	$98,000	$508,000
Total Company	$9,586,000	$14,273,000

Stipulated Settlement Letter, Exhibit 1 at 36.

160. Section 199 Deduction. MECO's response to CA-IR-376 included the calculation of the Company's test year Internal Revenue Code ("IRC") Section 199 deduction estimate. The Section 199 deduction resulted from the American Jobs Creation Act of 2004, which provided tax relief for U.S. based manufacturing activities, including the production of electricity. MECO's estimated DPAD for test year 2007 was initially $1,127,000 for total MECO, and the estimated related federal tax effect was $394,000. See MECO's response to CA-IR-376 at 3. The consolidated $394,000 was comprised of $362,000 for the Maui Division, $15,000 for the Lanai Division and $17,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 36-37; see MECO's response to CA-IR-376 at 3.

161. In its direct testimony, the Consumer Advocate stated that MECO's Section 199 deduction calculation assumptions in its Update filing were overly conservative, but to simplify the issues in this proceeding, the Consumer Advocate did not propose any adjustments. See CA T-3 at 61. The Consumer Advocate accepted MECO's $394,000 estimate, but recommended that ". . . this value be fixed and not be revised for later changes in input values or the rate of return awarded by the Commission, because multiple complex and potentially offsetting *adjustments are actually required to fully update the Section 199 deduction to mirror the methods* used to actually calculate the deduction taken by the Company on its tax return." Stipulated Settlement Letter, Exhibit 1 at 37; see CA-T-3 at 62.

162. Although MECO did not agree with fixing the $394,000 estimate, as a result of settlement discussions, the Parties agree to an updated consolidated DPAD test year estimate of

$1,061,000, and the estimated related federal tax effect of $371,000, which is comprised of $341,000 for the Maui Division, $14,000 for the Lanai Division and $17,000 for the Molokai Division. Stipulated Settlement Letter, MECO T-13, Attachment 1. The agreed upon estimate reflects most, but not all, of the settlement test year estimates, and the Parties accept the updated DPAD estimate as reasonable for settlement purposes. The updated estimate increases consolidated income tax expenses by $23,000 ($394,000-$371,000=$23,000). The Consumer Advocate reserves the right to reconsider the attribution of indirect overheads within the calculation of DPAD in future rate case proceedings, as tax regulation uncertainties regarding the allocation of expenses that are supportive in function to production activity in the determination of the DPAD are resolved. Stipulated Settlement Letter, Exhibit 1 at 37.

C.

Rate Base

163. MECO generally calculates the test year rate base in accordance with the concepts adopted and/or accepted by the Commission in prior rate case decisions, including Decision and Order No. 16922 (April 6, 1999), Docket No. 97-0346 ("MECO 1999 Decision"), MECO's test year 1999 rate case; Decision and Order No. 16134 (December 23, 1997), Docket No. 96-0040, MECO's test year 1997 rate case; Decision and Order No. 15544 (April 28, 1997), Docket No. 94-0345, MECO's test year 1996 rate case; and Decision and Order No. 13429 (August 5, 1994), Docket No. 7000, MECO's 1992 and 1993 two-year test period rate case. MECO T-15 at 2.

164. Rate base represents the net investment that is used and useful for public utility purposes and that has been funded by the Company's investors. See MECO T-15 at 2. MECO calculated an average rate base by dividing the sum of the 2006 and 2007 year-end balances for each component of rate base by two. Stipulated Settlement Letter, Exhibit 1 at 37.

165. Investments in assets include all investments necessary to provide reliable electric service to MECO's customers. In direct testimony, MECO's investments in assets consisted of the following components: (1) net cost of plant in service, (2) property held for future use, (3) fuel inventory, (4) materials and supplies inventory, (5) unamortized net statements of financial accounting standards ("SFAS") No. 109 regulatory asset, (6) pension asset, (7) OPEB amount, (8) unamortized system development costs, and (9) working cash. Stipulated Settlement Letter, Exhibit 1 at 37-38; MECO T-15 at 3.

166. Funds from non-investors are funds that are invested in assets to provide reliable electric service that are from sources other than investors. In direct testimony, funds from non-investors consisted of the following components: (1) unamortized contributions in aid of construction ("CIAC"), (2) customer advances for construction, (3) customer deposits, (4) accumulated deferred income taxes, and (5) unamortized investment tax credits. Stipulated Settlement Letter, Exhibit 1 at 38; see MECO T-15 at 33.

167. The following reflects the Company's estimated 2007 test year consolidated average rate base at present rates.

	Maui (MECO-1502)	Lanai (MECO-1508)	Molokai (MECO-1514)	MECO Consolidated (MECO-1501)
Net Plant in Service	$398,136,000	$15,187,000	$18,039,000	$431,361,000
Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Fuel Inventory	$14,629,000	$550,000	$632,000	$15,811,000
M&S Inventory	$11,263,000	$193,000	$195,000	$11,651,000
Unamortized Net SFAS 109 Regulatory Asset	$7,972,000	$429,000	$518,000	$8,918,000
Pension Asset	$3,093,000	$90,000	$139,000	$3,321,000
Unamortized System Development Costs	$217,000	$7,000	$10,000	$233,000
Working Cash at Present Rates	$7,343,000	$338,000	$295,000	$7,976,000
Unamortized CIAC	$(50,082,000)	$(1,983,000)	$(3,301,000)	$(55,365,000)

	Maui (MECO-1502)	Lanai (MECO-1508)	Molokai (MECO-1514)	MECO Consolidated (MECO-1501)
Customer Advances	$(4,271,000)	$(249,000)	$(154,000)	$(4,673,000)
Customer Deposits	$(3,601,000)	$(95,000)	$(187,000)	$(3,883,000)
Accumulated DIT	$(18,823,000)	$(782,000)	$(913,000)	(20,518,000)
Unamortized ITC	$(10,279,000)	$(428,000)	$(499,000)	$(11,205,000)
Average Rate base at Present Rates	$358,230,000	$13,257,000	$14,775,000	$386,261,000
Change in working cash	$(207,000)	$(6,000)	$(8,000)	$(221,000)
Average Rate base at Proposed Rates	$358,023,000	$13,251,000	$14,767,000	$386,040,000

Stipulated Settlement Letter, Exhibit 1 at 38.

168. Subsequently, MECO updated its test year consolidated estimate to $385,763,000 as shown below, based on updated rate base component amounts such as the replacement of 2006 year-end estimates with recorded amounts, updates to the 2007 test year estimates, and changes to working cash.

	Maui (CA-IR-304, Attachment A, page 12)	Lanai (CA-IR-304, Attachment A, page 25)	Molokai (CA-IR-304, Attachment A, page 38)	MECO Consolidated (CA-IR-304, Attachment A, page 3)
Net Plant in Service	$398,837,000	$15,450,000	$18,123,000	$432,410,000
Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Fuel Inventory	$14,629,000	$550,000	$632,000	$15,811,000
M&S Inventory	$10,436,000	$141,000	$178,000	$10,755,000
Unamortized Net SFAS 109 Regulatory Asset	$6,930,000	$379,000	$444,000	$7,753,000
Pension Asset	$2,989,000	$84,000	$143,000	$3,216,000
Working Cash at Present Rates	$7,121,000	$329,000	$282,000	$7,732,000
Unamortized CIAC	$(51,782,000)	$(2,006,000)	$(3,343,000)	$(57,131,000)
Customer Advances	$(4,963,000)	$(207,000)	$(126,000)	$(5,296,000)
Customer Deposits	$(3,413,000)	$(91,000)	$(177,000)	$(3,681,000)
Accumulated DIT	$(15,413,000)	$(640,000)	$(748,000)	$(16,801,000)
Unamortized ITC	$(10,676,000)	$(444,000)	$(518,000)	$(11,638,000)
Average Rate base at Present Rates	$357,328,000	$13,545,000	$14,890,000	$385,763,000
Change in working cash	$(174,000)	$(24,000)	$(15,000)	$(213,000)

	Maui (CA-IR-304, Attachment A, page 12)	Lanai (CA-IR-304, Attachment A, page 25)	Molokai (CA-IR-304, Attachment A, page 38)	MECO Consolidated (CA-IR-304, Attachment A, page 3)
Average Rate base at Proposed Rates	$357,154,000	$13,521,000	$14,875,000	$385,550,000

Stipulated Settlement Letter, Exhibit 1 at 38-39; see MECO response to CA-IR-304, Attachment A.

169. MECO's average rate base components not adjusted by the Consumer Advocate are as follows:

	Maui	Lanai	Molokai	MECO Consolidated
Net Plant in Service	$398,837,000	$15,450,000	$18,123,000	$432,410,000
Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Materials and Supplies Inventory	$10,436,000	$141,000	$178,000	$10,755,000
Unamortized CIAC	$(51,782,000)	$(2,006,000)	$(3,343,000)	$(57,131,000)
Customer Advances	$(4,963,000)	$(207,000)	$(126,000)	$(5,296,000)
Customer Deposits	$(3,413,000)	$(91,000)	$(177,000)	$(3,681,000)
Unamortized ITC	$(10,676,000)	$(444,000)	$(518,000)	$(11,638,000)

Stipulated Settlement Letter, Exhibit 1 at 39-40; see MECO response to CA-IR-304, Attachment A at 3, 12, 25, and 38.

170. In its direct testimony, the Consumer Advocate recommended the following test year estimates for MECO's consolidated rate base.

	Maui (CA-102, Schedule B)	Lanai (CA-103, Schedule B)	Molokai (CA-104, Schedule B)	MECO Consolidated (CA-101, Schedule B)
Net Plant in Service	$398,837,000	$15,450,000	$18,123,000	$432,410,000

Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Fuel Inventory	$11,027,000	$550,000	$632,000	$12,209,000
M&S Inventory	$10,436,000	$141,000	$178,000	$10,755,000
Unamortized Net SFAS 109 Regulatory Asset	$6,930,000	$379,000	$444,000	$7,753,000
Pension Asset	$0	$0	$0	$0
Working Cash at Present Rates	$6,847,000	$321,000	$274,000	$7,442,000
Unamortized CIAC	$(51,782,000)	$(2,006,000)	$(3,343,000)	$(57,131,000)
Customer Advances	$(4,963,000)	$(207,000)	$(126,000)	$(5,296,000)
Customer Deposits	$(3,413,000)	$(91,000)	$(177,000)	$(3,681,000)
Accumulated DIT	$(16,198,000)	$(672,000)	$(786,000)	$(17,656,000)
Unamortized ITC	$(10,676,000)	$(444,000)	$(518,000)	$(11,638,000)
Average Rate base at Present Rates	$349,679,000	$13,421,000	$14,701,000	$377,800,000
Change in working cash	$(98,000)	$(3,000)	$(4,000)	$(105,000)
Average Rate base at Proposed Rates	$349,581,000	$13,418,000	$14,697,000	$377,696,000

Stipulated Settlement Letter, Exhibit 1 at 40.

171. As noted from a comparison of the above tables, the difference between MECO and the Consumer Advocate results from the following six adjustments proposed by the Consumer Advocate:

(1) an adjustment to remove from the test year rate base MECO's proposal to include the pension asset and the associated accumulated deferred income taxes ("ADIT") (see CA-101, Schedule B-2);

(2) an adjustment to reduce MECO's estimate of the Maui Division's fuel inventory for IFO and diesel fuel due to the lower days inventory recommendation described in CA-T-2 (see CA-101, Schedule B-3);

(3) removal of MECO's proposal to include the ADIT associated with AFUDC in Construction Work in Progress ("CWIP") and tax capitalized interest ("TCI"), emission fees and IRP/DSM program costs (see CA-101, Schedule B-4);

(4) removal of MECO's proposal to treat the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP;

(5) an adjustment to correct MECO's estimated ADIT associated with emission fees (see CA-101, Schedule B-4); and

(6) removal of MECO's proposal to include the pension asset amortization and pension expense in the calculation of working cash (see CA-101, Schedule B-5).

Stipulated Settlement Letter, Exhibit 1 at 40-41.

172. Based on the discussion below, the Parties have reached agreement on each of these differences. In addition, the Parties have agreed on the implementation of a pension tracking mechanism and an OPEB tracking mechanism. As a result of these settlements, the Parties agree on the following 2007 test year average rate base estimates.

AVERAGE RATE BASE SETTLEMENT TEST YEAR ESTIMATE		
Division	Rate Base at Present Rates	Rate Base at Proposed Rates
Maui	$354,840,000	$354,721,000
Lanai	13,492,000	13,470,000
Molokai	14,791,000	14,777,000
MECO Consolidated	$383,123,000	$382,968,000

Stipulated Settlement Letter, Exhibit 1 at 41; see Statement of Probable Entitlement, Exhibits 1-4 at 1.

173. Pension Asset. MECO proposed to include $3,216,000 of pension asset in the test year average rate base. See June 2007 Update, MECO T-9, Attachment 5 at 1. The Consumer Advocate opposed the inclusion of the pension asset in rate base. See CA-101, Schedule B-2. MECO and the Consumer Advocate agreed that the exclusion of all or a portion of the pension asset in rate base would also require a corresponding adjustment to the ADIT reserve. The portion of ADIT associated with the pension asset amounted to $1,251,397. CA-101, Schedule

B-2; Stipulated Settlement Letter, Exhibit 1 at 41.

174. The Parties took similar positions in Docket No. 04-0113 (HECO 2005 test year rate case) and Docket No. 2006-0386 (HECO 2007 test year rate case). In Amended Proposed Final Decision and Order No. 23768 in Docket No. 04-0113, the Commission ruled that HECO's pension asset should not be included in HECO's 2005 test year rate base based on the facts of the HECO situation. Although the Company respectfully disagrees with the conclusion of Amended Proposed Final Decision and Order No. 23768, for purposes of reaching a global settlement, MECO accepts the Consumer Advocate's proposed exclusion of the pension asset from rate base (with the reversal of the associated ADIT) in this proceeding. Stipulated Settlement Letter, Exhibit 1 at 41.

175. Pension Tracking Mechanism. In HELCO's 2006 test year rate case (Docket No. 05-0315) and HECO's 2007 test year rate case (Docket No. 2006-0386), the Parties agreed to the implementation of a pension tracking mechanism. Similarly, in this proceeding, MECO and the Consumer Advocate agreed to the implementation of a pension tracking mechanism. Based on the facts and circumstances unique to each Company, the agreed to pension tracking mechanisms included a pension asset amortization for HELCO, but not for HECO. In the instant proceeding, however, the Consumer Advocate disagreed with MECO's proposal to include the pension asset amortization amounting to $241,800 in test year revenue requirements. See CA-101, Schedule C-16. For purposes of settlement in this docket, MECO agreed to exclude the amortization of the test year ending pension amount. In addition, the Parties agree to modify the Consumer Advocate's proposed pension tracking mechanism to reflect a requirement for MECO to fund the minimum required level under the law until the existing pension asset balance is eliminated. Reduced funding would reduce the pension asset. When the existing pension asset amount is

reduced to zero, the Company will fund the NPPC as specified in the pension tracking mechanism for MECO. If the existing pension asset amount is not reduced to zero by the next rate case, the Parties would address funding requirements for the pension tracking mechanism in that proceeding. Stipulated Settlement Letter, MECO T-9, Attachment 2 provides the terms of the pension tracking mechanism for MECO. The terms are the same as those agreed to by HECO and the Consumer Advocate in the HECO 2007 test year rate case. Stipulated Settlement Letter, Exhibit 1 at 42.

176. OPEB Tracking Mechanism. For purposes of settlement, MECO and the Consumer Advocate also agreed to the implementation of an OPEB tracking mechanism in this case, consistent with the agreement reached in the HELCO 2006 test year rate case (Docket No. 05-0315) and the HECO 2007 test year rate case (Docket No. 2006-0386). Stipulated Settlement Letter, MECO T-9, Attachment 3 provides the terms of the OPEB tracking mechanism for MECO, which are the same as those agreed to by HECO and the Consumer Advocate in the HECO 2007 test year rate case. Stipulated Settlement Letter, Exhibit 1 at 42.

177. Fuel Inventory. In its direct testimony, MECO's estimate of consolidated test year fuel inventory value was $15,811,090, including $14,628,834 for the Maui Division, $549,917 for the Lanai Division, and $632,339 for the Molokai Division. See MECO-408. Based on an analysis of the fuel delivery process and MECO's historical inventory levels, MECO concluded that it needs to carry 37 days of IFO inventory and 30 days of diesel fuel inventory for the Maui Division to maintain a reliable fuel supply to its generating units, even if disruptions of reasonable scope occur in the supply chain. See MECO T-4 at 41-49; MECO-409. Stipulated Settlement Letter, Exhibit 1 at 42.

178. The Consumer Advocate performed its own analysis based partially on

information provided in MECO T-4 and recommended that the Maui Division fuel inventory should be based on a 30-day supply of IFO (see CA-T-2 at 29-33; CA-208) and a 22-day supply of diesel fuel (see CA-T-2 at 33-36; CA-208). The Consumer Advocate's recommended inventory day supply of fuel was valued at $11,026,849 (see CA-208 at 1), or $3,602,000 (rounded) below MECO's estimate of $14,628,834. The Consumer Advocate did not oppose MECO's proposed fuel inventory levels of the Lanai and Molokai Divisions. Stipulated Settlement Letter, Exhibit 1 at 43.

179. Although the Consumer Advocate continued to have concerns with the lack of support for MECO's proposed fuel inventory levels, for the purposes of reaching a global settlement on the test year revenue requirements for this proceeding, the Consumer Advocate agreed to reflect MECO's proposed $14,628,834 of fuel inventory in Maui Division in the test year average rate base on the condition that MECO would complete a fuel inventory study for submission to the Commission and the Consumer Advocate in its next rate case to support the Company's proposed fuel inventory levels. Stipulated Settlement Letter, Exhibit 1 at 43.

180. Materials and Supplies Inventories. In its direct testimony, MECO included consolidated test year materials and supplies inventories of $11,651,000, including $11,263,000 for the Maui Division, $193,000 for the Lanai Division, and $195,000 for the Molokai Division. See MECO-1504, -1510 and -1516. In its June Update, MECO reduced its consolidated test year estimate for materials and supplies inventories by $896,000 to $10,755,000, including $10,436,000 for the Maui Division, $141,000 for the Lanai Division, and $178,000 for the Molokai Division, to reflect more current recorded inventory values. See MECO response to CA-IR-304, Attachment A[21] at 3; Stipulated Settlement Letter, Exhibit 1 at 43.

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[21] Stipulated Settlement Letter, Exhibit 1 at 43 incorrectly cited Attachment 1. The proper citation should be Attachment A.

181. In its direct testimony, the Consumer Advocate did not contest MECO's June Update test year estimates for material and supplies inventories. Stipulated Settlement Letter, Exhibit 1 at 43; see CA-101, Schedule B.

182. Accumulated Deferred Income Taxes. In its direct testimony (MECO T-13), the Company proposed an average consolidated credit balance of $20,518,000 for ADIT in the 2007 test year, which was comprised of $18,823,000 for the Maui Division, $782,000 for the Lanai Division and $913,000 for the Molokai Division. Stipulated Settlement Letter, Exhibit 1 at 43; see MECO-1305 at 5-6.

183. In its June 2007 Update for MECO T-13, the Company reduced its test year estimate of the consolidated ADIT average credit balance by $3,718,000 to reflect the: (1) actual 2006 recorded balances (also submitted in the Company's response to CA-IR-182); (2) estimated 2006 post year end adjustments; (3) updated 2007 amounts for certain revised test year estimates of revenue and expenses; (4) the exclusion of the regulatory asset for AFUDC Equity gross up in CWIP as further explained in the Company's response to CA-IR-182; (5) the full inclusion of deferred taxes related to TCI as further explained in the Company's response to CA-IR-182; (6) the ratemaking adjustments for the reversal of AOCI (see MECO T-9 at 84-107); (7) the exclusion of deferred taxes on IRP/DSM costs, consistent with the treatment in Docket No. 05-0315 (HELCO's 2006 test year rate case); and (8) the reclassification and adjustment of balances for proper presentation as explained in the Company's response to CA-IR-182. See the June 2007 update, MECO T-13, Attachment 1 at 9-10, MECO-1305, Attachment 1 at 11-12, MECO-WP-1305; Stipulated Settlement Letter, Exhibit 1 at 44.

184. In its direct testimony, the Consumer Advocate recommended a consolidated test year average ADIT estimate of $17,656,000 (see CA-101, Schedule B at 1), resulting in a

proposed increase of $856,000 to the Company's June 2007 Update estimate (a reduction of $2,862,000 from the Company's direct testimony estimated credit). The lower recommendation resulted from the following four adjustments proposed by the Consumer Advocate:

(1) an adjustment to remove the ADIT related to MECO's pension asset (see CA-101, Schedule B at 2; CA-101, Schedule B-2);

(2) an adjustment to restore the ADIT related to AFUDC and TCI (see CA-101, Schedule B at 2; CA-101, Schedule B-4);

(3) an adjustment to correct the ADIT related to emission fees (see CA-101, Schedule B at 2; CA-101, Schedule B-4); and

(4) an adjustment to reflect the ADIT on IRP/DSM program costs (see CA-101, Schedule B at 2; CA-101, Schedule B-4).

Stipulated Settlement Letter, Exhibit 1 at 43-44.

185. As a result of the settlement discussions, the Parties agree to a revised consolidated ADIT test year estimate of $17,213,000 for MECO, which is comprised of $15,791,000 for the Maui Division, $656,000 for the Lanai Division and $766,000 for the Molokai Division. See Statement of Probable Entitlement, Exhibits 1-4 at 3. The test year estimate is a $413,000 larger credit than MECO's June 2007 Update estimate of $16,800,000, and reflects the settlement of the above four issues as described below. Stipulated Settlement Letter, Exhibit 1 at 44.

186. ADIT related to MECO's pension asset. Based on the settlement reached on the ratemaking treatment of the Company's pension asset as discussed above, the Parties agree that the ADIT related to the estimated pension asset should be removed from the test year rate base. Stipulated Settlement Letter, Exhibit 1 at 44; Stipulated Settlement Letter, MECO T-13,

Attachment 3.

187. ADIT related to AFUDC and TCI. The AFUDC applied to the cost of a capital project is not recognized for tax purposes and is neither taxable income nor part of the depreciable tax basis of the asset. Consequently, deferred income taxes are provided on the amount of AFUDC incurred and recognized as income for book purposes but not for tax purposes. The income tax law requires the cost of financing self constructed assets to be capitalized, which MECO refers to as tax capitalized interest ("TCI"). Section 263A of the IRC requires interest related to self constructed assets to be capitalized during the construction period. This interest capitalization is the source of a book/tax temporary difference and creates a negative deferred income tax. Stipulated Settlement Letter, Exhibit 1 at 44-45.

188. In the Company's direct testimony, MECO excluded the ADIT related to AFUDC and TCI in CWIP, based upon the premise that CWIP is not included within rate base so the related ADIT balances should also be excluded. MECO's consolidated average ADIT estimate related to AFUDC in CWIP was $153,569, and the estimate related to TCI was $45,669. Stipulated Settlement Letter, MECO T-13, Attachment 3. In the June 2007 Update for MECO T-13, filed on August 24, 2007, the Company updated its consolidated test year estimate for AFUDC in CWIP to $1,074,620 (Stipulated Settlement Letter, MECO T-13, Attachment 3) to reflect the 2006 recorded balances, estimated 2006 post year end adjustments, and updated 2007 amounts for AFUDC and property closed to plant in service. In updating its estimates, the Company eliminated the $1,074,620 ADIT on AFUDC in CWIP consistent with the direct testimony but did not eliminate the ADIT on TCI related to CWIP. Contrary to the direct testimony, MECO included the full amount of TCI, $3,752,558 in ADIT. See Stipulated Settlement Letter, MECO T-13, Attachment 3; MECO's response to CA-IR-182 at 10-12. An

attendant adjustment was also made to exclude the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP. See June 2007 Update, MECO T-13, Attachment 1 at 14 (i.e., page 2 of the updated MECO-1306). This exclusion decreased the 2007 average Unamortized Net SFAS 109 Regulatory Asset by $1,207,000 (the average of $1,352,000 and $1,062,000) and decreased average ADIT by its tax effect of $469,579. Stipulated Settlement Letter, MECO T-13, Attachment 3; Stipulated Settlement Letter, Exhibit 1 at 45.

189. In its response to CA-IR-377, the Company stated, "MECO has changed its position with respect to the deferred taxes related to AFUDC in CWIP and TCI in light of the settlement position in HECO Docket No. 2006-0386. In that case, HECO agreed to include in rate base all the deferred taxes associated with AFUDC and to similarly include all the deferred taxes associated with TCI." As a result, the Consumer Advocate proposed to restore the ADIT balances related to: (1) AFUDC in CWIP, (2) the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP, and (3) TCI (see CA T-3 at 63-64), but inadvertently did not propose to add back the adjustment to the Regulatory Asset itself for the AFUDC Equity Tax Gross Up related to AFUDC in CWIP. Stipulated Settlement Letter, Exhibit 1 at 45.

190. As a result of settlement discussions, the Parties agreed to restore the average ADIT balances totaling $1,544,199 (the previously mentioned $1,074,620 and $469,579) as proposed by the Consumer Advocate (see CA-101, Schedule B-4). The $1,544,199 is comprised of $1,416,803 for the Maui Division, $58,679 for the Lanai Division and $68,717 for the Molokai Division (allocated based on relative plant balances on December 31, 2006, as shown in MECO's response to CA-IR-380 at 3). In addition, the Parties agree to add back the average test year adjustment to the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP in the consolidated amount of $1,207,000 (i.e., ($1,352,000 + $1,062,000) ÷ 2), which is

comprised of $1,080,000 for the Maui Division, $57,000 for the Lanai Division and $70,000 for the Molokai Division (see June 2007 Update, MECO T-13, Attachment 1 at 13-14; see also the discussion below regarding the Unamortized Net SFAS 109 Regulatory Asset). Stipulated Settlement Letter, Exhibit 1 at 45-46.

191. ADIT related to emission fees. Emission fees are accrued monthly for book purposes but are not deducted for tax purposes until paid to the State DOH by May 1st (extended due date) of the following year. This creates a temporary difference between the amount accrued in the current year (increases taxable income in current year) and the amount paid in the following year (decreases taxable income in the year fees are paid). Stipulated Settlement Letter, Exhibit 1 at 46.

192. In the Company's direct testimony, MECO's consolidated average ADIT estimate related to emission fees was $167,080. Stipulated Settlement Letter, MECO T-13, Attachment 3. The amount was subsequently revised in the June 2007 Update for MECO T-13, to $293,431 to include actual 2006 recorded balances, estimated 2006 post year end adjustments, and updated 2007 amounts for certain revised test year estimates of revenue and expenses. As updated, the Company's estimated ADIT balances at December 31, 2007 with respect to emission fees included $331,476 for federal taxes and $60,612 for state taxes. See Stipulated Settlement Letter, MECO T-13, Attachment 3. In its response to CA-IR-379, MECO indicated that the ADIT balances associated with the estimated emission fees at December 31, 2007 were incorrect. The federal and state balances should have been $127,351 and $23,286, respectively. Stipulated Settlement Letter, Exhibit 1 at 46.

193. As a result, the Consumer Advocate proposed to adjust the ADIT balances related to emission fees by a consolidated $120,727 (see CA-101, Schedule B-4) to reflect the corrected

December 31, 2007 estimated balances. The $120,727 consolidated average test year adjustment is comprised of $110,767 for the Maui Division, $4,588 for the Lanai Division and $5,372 for the Molokai Division (allocated based on relative plant balances at December 31, 2006, as shown in MECO's response to CA-IR-380 at 3). MECO agrees with the Consumer Advocate's proposed adjustment, and the resulting consolidated test year ADIT estimate of $172,704 ($293,431-$120,727). Stipulated Settlement Letter, Exhibit 1 at 46.

194. <u>ADIT on IRP/DSM program costs</u>. For book purposes, IRP/DSM program costs are deferred when incurred and expensed when the related revenues are collected. For tax purposes, DSM program costs are deducted when incurred. This creates a book/tax temporary difference. Stipulated Settlement Letter, Exhibit 1 at 46.

195. In the Company's direct testimony, the Company's consolidated estimate of average ADIT on IRP/DSM program costs was $331,930. <u>See</u> Stipulated Settlement Letter, MECO T-13, Attachment 3. The amount was subsequently revised in the June 2007 Update for MECO T-13 to $441,482, based on MECO's proposal to exclude the ADIT on IRP costs from the test year. <u>See</u> Stipulated Settlement Letter Attachment MECO T-13, Attachment 3; June 2007 Update, MECO T-13 at 2. As stated on page 8 of MECO's response to CA-IR-182, "Over- and under-recovered balances of deferred DSM and IRP costs are not included in rate base, so the related deferred tax balances should also be excluded from rate base. This is consistent with HELCO's treatment of its DSM and IRP deferred taxes in Docket No. 05-0315." Stipulated Settlement Letter, Exhibit 1 at 46-47.

196. In its written testimony, the Consumer Advocate disagreed with MECO, and proposed to include average ADIT on IRP/DSM program costs of $441,572. <u>See</u> CA-101, Schedule B-4. The Consumer Advocate's estimate differs slightly from MECO's estimate

because the Consumer Advocate used $68,429 instead of $68,249 as the IRP/DSM State Deferred Taxes balance at 12/31/2007. On pages 66 and 67 of CA-T-3, the Consumer Advocate stated: "To fully account for the economic impact of IRP/DSM program spending and cost recovery, given the allowance of interest on gross pretax deferred costs, the deferred tax impacts must also be treated as jurisdictional and included in rate base (because they are not recognized when interest is accrued)". Stipulated Settlement Letter, Exhibit 1 at 47.

197. For purposes of settlement, the Consumer Advocate accepts MECO's proposal to exclude from the test year ADIT the deferred taxes on IRP costs. This is consistent with the Consumer Advocate's position in Docket No. 05-0315. <u>See</u> Docket No. 05-0315, CA-T-1 at 73. Consideration should be given to allowing interest on only the net post-tax deferred IRP/DSM costs prospectively within reconciliation calculations that are performed, so as to recognize that ADIT balances associated with this temporary difference are being retained for shareholders as a result of rate base exclusion of such amounts. Stipulated Settlement Letter, Exhibit 1 at 47.

198. <u>Unamortized Net SFAS 109 Regulatory Asset</u>. As discussed more fully in the ADIT section of this document with respect to the ADIT related to AFUDC and TCI, in the June 2007 Update for MECO T-13, filed on August 24, 2007, the Company eliminated ADIT on AFUDC in CWIP, but restored, to the full amount, the TCI in ADIT. Stipulated Settlement Letter, MECO T-13, Attachment 3. An attendant adjustment was also made to exclude the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP. <u>See</u> June 2007 Update, MECO T-13, Attachment 1 at 14 (i.e., page 2 of the updated MECO-1306). This exclusion decreased 2007 average Unamortized Net SFAS 109 Regulatory Asset by $1,207,000 (the average of $1,352,000 and $1,062,000) and decreased average ADIT by its tax effect of $469,579. Stipulated Settlement Letter, Exhibit 1 at 47; <u>see</u> Stipulated Settlement Letter, MECO

T-13, Attachment 3.

199. In MECO's response to CA-IR-377, the Company stated, "MECO has changed its position with respect to the deferred taxes related to AFUDC in CWIP and TCI in light of the settlement position in HECO Docket No. 2006-0386. In that case, HECO agreed to include in rate base all the deferred taxes associated with AFUDC and to similarly include all the deferred taxes associated with TCI". As a result, the Consumer Advocate proposed to restore the ADIT balances related to (1) AFUDC in CWIP, (2) the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP, and (3) TCI (see CA T-3 at 63-64), but inadvertently did not propose to add back the adjustment to the Regulatory Asset itself for the AFUDC Equity Tax Gross Up related to AFUDC in CWIP. Stipulated Settlement Letter, Exhibit 1 at 47-48.

200. As discussed in the "ADIT related to AFUDC and TCI" section above, the Parties agree for settlement purposes to restore the average ADIT balances totaling $1,544,199 as proposed by the Consumer Advocate (see CA-101, Schedule B-4). In addition, the Parties agree to add back the average test year adjustment to the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP in the consolidated amount of $1,207,000, which is comprised of $1,080,000 for the Maui Division, $57,000 for the Lanai Division and $70,000 for the Molokai Division. See June 2007 Update, MECO T-13, Attachment 1 at 13-14; Stipulated Settlement Letter, Exhibit 1 at 48.

201. Working Cash. Working cash represents the net cash needed to recognize that electric service is provided before customers pay for such services. Working cash is comprised of the net of the revenue collection lag and the payment lag and is calculated by multiplying the net collection lag days by the average daily expenditure for each category of payment lag and then summing the product of each category. Stipulated Settlement Letter, Exhibit 1 at 38-39; see

MECO T-15 at 16-19.

202. In its direct testimony, MECO included six categories of payment lag: fuel purchases, O&M labor, purchased power, O&M non-labor, revenue taxes and income taxes. The test year estimate of working cash at present and proposed rates was $7,343,000 and $7,136,000 for Maui Division (MECO-1507), $338,000 and $332,000 for the Lanai Division (MECO-1513), and $295,000 and $287,000 for the Molokai Division (MECO-1519). The consolidated test year estimate of working cash for MECO was $7,976,000 at present rates and $7,755,000 at proposed rates (MECO-WP-2001 at 2). Stipulated Settlement Letter, Exhibit 1 at 48.

203. These amounts were subsequently updated in the June 2007 Update (MECO T-15), to reflect the updated test year expense amounts presented by other witnesses in their June 2007 Updates and responses to IRs. The Company also proposed adjustments to the working cash calculation as a result of its proposed pension and OPEB tracking mechanisms. The pension tracking mechanism proposed in the Company's June 2007 Update (MECO T-9) required MECO to make contributions to the pension plan equal to the net periodic pension cost. Therefore, the Company proposed a payment lag of 14 days for pension expense based on the anticipated monthly payments that would be made upon implementation of the pension tracking mechanism. However, the Company stated that if the pension tracking mechanism is not implemented, the payment lag for pension expense would be zero, as previously submitted in direct testimony. The pension tracking mechanism also proposed amortization of the pension asset in rate base over a five year period. Therefore, the Company proposed inclusion of the pension amortization expense as a separate component of working cash with a revenue collection lag of 36 days consistent with all other working cash items and a payment lag of zero. Stipulated Settlement Letter, Exhibit 1 at 48-49.

204. The proposed OPEB tracking mechanism required MECO to make contributions to the OPEB plan equal to the net periodic benefit cost. The Company proposed a payment lag of 84 days for OPEB expense based on the anticipated quarterly payments that would be made to the OPEB trust accounts. However, the Company stated that if the OPEB tracking mechanism is not implemented, the payment lag for OPEB expense would be zero as previously submitted in direct testimony. Stipulated Settlement Letter, Exhibit 1 at 49; see June 2007 Update, MECO T-15 at 2-4.

205. In its written testimony, the Consumer Advocate maintained that absent a link between pension accruals and recurring fund contributions, the pension accrual is nothing more than another non-cash expense. The Consumer Advocate recommended removal of this item from the lead lag study, absent plans or a study that specifically analyzes pension cash flows. With respect to OPEB accruals, the Consumer Advocate stated that Decision and Order No. 13659 required MECO to fund its entire postretirement benefit costs to the maximum extent possible and that MECO had made recurring annual contributions to external funds since the issuance of Decision and Order No. 13659. As a result, the Consumer Advocate recommended rejection of a proposal to link the value of the OPEB payment lag to whether the Commission adopts the OPEB tracking mechanism but recognized in its working cash calculation an 84-day payment lag for OPEB. Stipulated Settlement Letter, Exhibit 1 at 49; see CA-T-1 at 112-113.

206. Based on the settlement reached with regard to the exclusion of the "Pension Asset" from the test year revenue requirement and the implementation of a "Pension Tracking Mechanism" as discussed above, the Company agrees to exclude the pension expense and pension asset amortization from the working cash calculation and to utilize an 84-day payment lag for OPEB in the calculation of the O&M non-labor payment lag. Stipulated Settlement

Letter, Exhibit 1 at 49.

207. The revised O&M non-labor payment lag days estimate, as a result of incorporating the above discussed items, is 37 days. See Stipulated Settlement Letter, MECO T-15, Attachment 1. This payment lag was calculated on a consolidated basis and is applied to each division. This methodology is consistent with MECO's presentation in direct testimony (MECO T-15), in the June 2007 Update for MECO T-15, and other MECO rate cases. Other differences in the working cash resulted from differences in the related expense items. For purposes of settlement, the Parties agree to an O&M non-labor payment lag of 37 days and to the following test year working cash amounts at present and proposed rates:

	Working Cash Settlement Test Year Estimates (000s)	
	At Present Rates	At Proposed Rates
Maui Division	$6,921	$6,802
Lanai Division	$319	$297
Molokai Division	$273	$259
Total Company	$7,513	$7,358

Stipulated Settlement Letter, Exhibit 1 at 49-50; Statement of Probable Entitlement, Exhibits 1-4 at 3.

D.

Rate of Return

1.

Introduction

208. The following guidelines apply to the determination of a fair rate of return:

> [A] fair return must:
>
> (1) be commensurate with returns on investment in other enterprises having corresponding risks and uncertainties;

(2) provide a return sufficient to cover the capital costs of the business, including service on the debt and dividends on the stock; and

(3) provide a return sufficient to assure confidence in the financial integrity of the enterprise to maintain its credit and capital-attracting ability.

Re Hawaiian Electric Co., Docket No. 04-0113, Decision and Order No. 24171 (May 1, 2008) ("D&O 24171") at 70; Re Hawaiian Electric Co., Docket No. 7766, Decision and Order No. 14412 (December 11, 1995) ("D&O 14412") at 47; Re Hawaiian Electric Co., Docket No. 7700, Decision and Order No. 13704 (December 28, 1994) ("D&O 13704") at 60-61; Re Hawaiian Electric Co., Docket No. 6998, Decision and Order No. 11699 (June 30, 1992) ("D&O 11699") at 139-40; and Re Hawaii Electric Light Co., Docket No. 94-0140, Decision and Order No. 15480 (April 2, 1997) ("D&O 15480") at 31 (citing Bluefield Waterworks and Improvement Co. v. Public Service Comm'n, 262 U.S. 679 (1923) and Federal Power Comm'n v. Hope Natural Gas, 320 U.S. 591 (1944); see Re Hawaii Electric Light Co., Docket No. 7764, Decision and Order No. 13762 (February 10, 1995) ("D&O 13762") at 47; Re Hawaii Electric Light Co., Docket No. 6999, Decision and Order No. 11893 (October 2, 1992) ("D&O 11893") at 64; Re Maui Electric Co., Docket No. 97-0346, Amended Decision and Order No. 16922 (April 6, 1999) ("D&O 16922") at 33; Re Maui Electric Co., Docket No. 96-0040, Decision and Order No. 16134 (December 23, 1997) ("D&O 16134") at 16-17; Re Maui Electric Co., Docket No. 94-0345, Decision and Order No. 15544 (April 28, 1997) ("D&O 15544") at 33; Re Maui Electric Co., Docket No. 7000, Decision and Order No. 13429 (August 5, 1994) ("D&O 13429") at 52; Federal Power Commission v. Memphis Light, Gas & Water Division, 411 U.S. 458 (1973); Permian Basin Rate Cases, 390 U.S. 747 (1968); Duquesne Light Co. vs. Barasch, 488 U.S. 299 (1989).

209. A percentage return on rate base that is at least equal to the Company's composite

cost of capital would be a fair rate of return in this docket. The composite cost of capital represents the carrying cost of the money received from investors to finance the rate base. In order to adequately compensate those who have invested in the Company, MECO needs to be allowed a reasonable opportunity to earn at least its composite cost of capital. Further, a rate of return on rate base at least equal to the Company's composite cost of capital would satisfy the three guidelines to a fair return, provided that the Company is given a realistic opportunity to actually earn the return. A finding by the Commission of a return on rate base at least equal to the Company's composite cost of capital would allow the Company to cover the capital costs of the business; it would provide a return on investment commensurate with returns on other investments having corresponding risks; and it would provide assurances to the financial community of the Company's financial integrity (or financial strength). See MECO T-17 at 3.

2.

Cost of Capital

210. Capitalization. MECO proposed the following capitalization amounts and weights in direct testimony:

	Amounts ($000)	Weights (%)
Short-term debt	4,750	1.27
Long-term debt	150,585	40.15
Hybrid securities	9,192	2.45
Preferred stock	4,693	1.25
Common stock	205,882	54.89

See MECO-1701; see also Stipulated Settlement Letter, MECO T-17, Attachment 1. The Consumer Advocate agreed to utilize the capital structure proposed by MECO. Stipulated Settlement Letter, Exhibit 1 at 50; see CA-T-4 at 3.

211. Cost of Capital. There were no differences between MECO and the Consumer Advocate with respect to the cost rates for short-term debt, long-term debt, hybrid securities and

preferred stock. See MECO-1701; CA-413. The weighted earnings requirement for short-term debt, long-term debt, hybrid securities and preferred stock is the same for MECO and the Consumer Advocate. See MECO-1701; CA-T-4 at 3; CA-413. The Parties agree to the capital structure as discussed above. Therefore, there are no differences related to the weighted earnings requirements for short-term debt, long-term debt, hybrid securities and preferred stock. Stipulated Settlement Letter, Exhibit 1 at 50.

212. Return on Common Equity and Composite Cost of Capital. In MECO's 2007 test year rate case, MECO recommended a rate of return on common equity of 11.25% in direct testimony.[22] See MECO T-17 at 52. This resulted in an overall cost of capital of 8.98%. See MECO-1701. The Consumer Advocate proposed that the cost of common equity for MECO is within a broad range of 9.00% to 11.00%, but proposed to use the middle portion of this range and thus recommended a range of 9.50% to 10.50% for the rate of return on common equity. See CA-T-4 at 4-5. This resulted in an overall cost of capital in the range of 8.02% to 8.57% (8.29% mid-point which incorporates a cost of common equity of 10.00%). See CA-T-4 at 5. The Consumer Advocate's specific cost of capital recommendation for MECO was 8.29%. Stipulated Settlement Letter, Exhibit 1 at 51; see CA-T-4 at 5.

213. For the purpose of reaching a global settlement in this rate case, MECO and the Consumer Advocate agree on a rate of return on common equity of 10.7% for the test year. This results in a composite cost of capital of 8.67%. See Stipulated Settlement Letter, MECO T-17, Attachment 1. The 10.7% return on common equity is the same as that found reasonable by the Commission for purposes of interim rate relief in Docket No. 04-0113, HECO's 2005 test year

[22] In the settlement negotiations, the Company also provided supplemental information regarding its credit ratings. See MECO's response to CA-IR-5, revised September 13, 2007 at 8-11, for a copy of S&P's article that discusses MECO's downgrade. See Docket No. 2006-0386, HECO 2007 Test Year Rate Case, August 2007 Supplement (September 6, 2007), HECO T-19, Attachment 4, for a copy of the Moody's article dated December 21, 2006.

rate case. See Interim D&O No. 22050 at 6-7. In addition, in Docket No. 04-0113, page 75 of Amended Proposed Decision and Order No. 23768 included a statement that the Commission found the 10.7% cost of common equity to be reasonable. The Commission also accepted a 10.7% return on common equity for purposes of interim rate relief in HECO's 2007 test year rate case, Docket No. 2006-0386 (see Interim D&O No. 23749 at 9) and HELCO's 2006 test year rate case, Docket No. 05-0315 (see Interim D&O No. 23342 at 9) Stipulated Settlement Letter, Exhibit 1 at 51.

E.

Cost of Service/Rate Increase Allocation/Rate Design

1.

Cost of Service Study

214. A cost of service study is a tool used to estimate the cost responsibility of the different rate classes served by MECO for ratemaking purposes. The Company prepared two types of cost of service studies for this proceeding, one based on embedded or accounting costs, and the other was based on marginal costs. Although both studies reflected the costs of providing service, the procedure and emphasis of each of these two studies were different. An embedded cost of service study (or simply "cost of service study") is a process used to categorize and allocate the total utility costs of providing service (the utility's total revenue requirements) to the various rate classes in order to determine each class' estimated cost responsibility. In contrast, a marginal cost study determines the change in the utility's costs of providing service due to a unit change in kW, kWh, or number of customers served by the utility. Final Settlement Letter,[23] Exhibit 1 at 1; MECO T-18 at 1-2.

[23] Letter dated December 12, 2007, from William A. Bonnet to the Commission, subject: Docket No. 2006-0387 – MECO 2007 Test Year Rate Case, Final Settlement Letter – Rate Design Issues.

215. Development of MECO's embedded cost of service study for this proceeding involved three steps. First, the functionalization process categorized each of the costs and rate base items into the major operating functions: production, transmission and distribution. Second, the classification process classified each of the functionalized costs and rate base items into each of three costs components: energy-related, demand-related and customer-related. Third, each of the three costs components were allocated to the different rate classes by allocation factors. See MECO T-18 at 5-9. MECO provided its embedded cost of service study in direct testimony based on a cost allocation methodology previously approved by the Commission. Final Settlement Letter, Exhibit 1 at 1; see MECO T-18 at 11-12.

216. In its direct testimony, the Consumer Advocate stated that MECO's general procedures for its embedded cost of service study are widely accepted and, with a few exceptions, are reasonable for a utility with MECO's service characteristics. CA-T-5 at 8. The Consumer Advocate also concurred with the Company's methodology for allocating the test year production and transmission demand costs. Final Settlement Letter, Exhibit 1 at 1; CA-T-5 at 11.

217. However, the Consumer Advocate expressed two concerns with MECO's cost of service methodology. First, the Consumer Advocate asserted that because the distribution network of poles, lines and transformers do not vary directly with the number of customers being served, these costs should be classified as entirely demand-related, as opposed to partially customer-related as classified by MECO. Second, the Consumer Advocate maintained that some production O&M costs vary with kWh output and therefore should be treated as energy-related costs. In contrast, MECO had treated all non-fuel production O&M costs as demand-related. The Consumer Advocate contended that its recommended changes to classifying and allocating

the respective costs are reasonable and should be considered by the Commission. The Consumer Advocate also recommended that the Company conduct a study to determine the mix of demand/energy production O&M cost drivers in support of its next rate case filing and embedded cost of service study. Final Settlement Letter, Exhibit 1 at 1-2; CA-T-5 at 9, 11-12.

218. The Consumer Advocate did not propose any changes to the Company's marginal cost study. Final Settlement Letter, Exhibit 1 at 2; CA-T-5.

219. As HECO and the Consumer Advocate agreed in Docket No. 2006-0386 (HECO 2007 test year rate case), for settlement purposes in this rate case:

> (a) The Parties concur that agreement on a cost of service methodology is not a requirement to settle this rate case since the proposed rates that are based on the agreed upon test year revenue requirements are not based directly upon the results of the cost of service study as noted below. The agreements on revenue allocation and rate design presented below are reasonable given the results of both MECO's and the Consumer Advocate's proposed cost of service methodologies;
>
> (b) MECO agrees in its next rate case to present a cost of service study utilizing the same distribution classification methodology as it used in this case, as well as a cost of service scenario that classifies all distribution network costs (poles, conduits, lines, and transformers investment and expenses) as demand-related. MECO can present other cost of service scenarios, if desired, and make whatever recommendations it chooses regarding interpretation and utilization of cost of service evidence; and
>
> (c) MECO agrees to conduct studies designed to isolate the demand (fixed) versus energy (variable) elements of its non-fuel production O&M expenses for use in the next MECO rate case, to be included in all of MECO's cost of service scenarios.

Final Settlement Letter, Exhibit 1 at 2.

2.

Inter-Class Allocation of Rate Increase

220. In its direct testimony, MECO proposed to assign the revenue increase in the

same percentage to each division (Maui, Lanai and Molokai) and to each rate schedule within each division (MECO T-18 at 5) because the allocation of the revenue increase according to cost of service would have resulted in excessively large increases for customers on Lanai and Molokai. *Therefore, to mitigate the hardship on these customers, the Company proposed an* equal percentage increase for each division. Final Settlement Letter, Exhibit 1 at 2; MECO T-1 at 21-22.

221. The Consumer Advocate stated that because cost of service results can change significantly from one test period to another due to shifts in load conditions, expense levels or methodology changes, cost of service results should only be used as a guide and other factors must also be considered in developing rates that are intended to recover the test year revenue requirement. CA-T-5 at 36. The Consumer Advocate concurred that customer impacts should be considered in developing the proposed rates and thus agreed with the Company's proposal to assign the same percentage increase to each division and to each rate schedule within each division. In supporting MECO's proposal, the Consumer Advocate noted that an equal percentage rate increase will produce gradual movement toward indicated cost of service under either the MECO or Consumer Advocate's recommended embedded cost of service allocation methodologies. Final Settlement Letter, Exhibit 1 at 2-3; CA-T-5 at 38.

3.

Rate Design and Proposed Rates

222. Rate design is the conversion or translation of the Company's proposed revenue requirements for each rate class into a pricing structure to collect MECO's required revenues to cover its total costs of providing service. MECO T-18 at 13.

223. In this case, MECO proposed an inclining rate block structure in Schedule R,

similar in structure to HELCO's proposal in Docket No. 05-0315 and HECO's proposal in Docket No. 2006-0386. Proposed demand charges for the commercial rate classes are designed to recover a higher percentage of demand costs than in previous rate cases. The billing demand calculation in Schedule J is proposed to be modified to the same calculation as exists for Schedule P. The proposed adjustments for supply voltage delivery for Schedule G, Schedule J, Schedule F, and Schedule U are based on a test year 2007 analysis performed by the Transmission Planning division. Finally, energy charges are adjusted to achieve the proposed revenue by rate class. In the case of Schedule J, Schedule P, and Schedule F, each energy charge tier is proposed to be adjusted by approximately the same amount in cents per kWh. MECO T-18 at 14.

224. Schedule R. Schedule R service applies to residential lighting, heating, cooking, air conditioning and power in a single family dwelling unit metered and billed separately by the Company. The Company proposed an inclining block rate design (with lower than average rate increases for customers with kWh usage in the lowest tier, no more than approximately the class average rate increase for customers with kWh usage in the middle tier, and above average increases for customers with kWh usage in the highest tier), no changes to customer charges, and a provision for customers in the LIHEAP program to be charged only at the lowest price tier of the non-fuel energy charges. The merits of an inclining block rate design include mitigation of rate impact on the smallest users of the system, pricing signals that help to encourage conservation, and assignment of a greater share of the cost increase to the larger users. The provision for customers in the LIHEAP program would be the same as proposed in the most recent HECO and HELCO rate cases. Final Settlement Letter, Exhibit 1 at 3; MECO T-18 at 15-16.

225. As it had done in Docket Nos. 2006-0386 (HECO 2007 test year rate case) and 05-0315 (HELCO 2006 test year rate case), the Consumer Advocate agreed with the Company's residential inclining block rate design proposals, stating that inclining block rate structures can strengthen the incentive for residential customers to invest in conservation, improve affordability of electric service for customers with low usage levels and mitigate rate increase impacts on lower income consumers who elect to limit their usage to the lower tiers of the rate. The Consumer Advocate also stated that the proposal for LIHEAP customers is an important element of the inclining block rate proposal that should be approved by the Commission. Final Settlement Letter, Exhibit 1 at 3; CA-T-5 at 43-44.

226. Commercial Rate Schedules – Customer Charges. Schedule G is for general power service applicable to small commercial customers with loads not exceeding 5,000 kWh per month or loads less than or equal to 25 kW. MECO proposed Schedule G customer charges of $25 per month for single phase service and $40 per month for three phase service at Maui Division (MECO T-18 at 18), $30 per month for single phase service and $45 per month for three phase service at Lanai Division (MECO T-18 at 49), and $23 per month for single phase service and $34 per month for three phase service at Molokai Division (MECO T-18 at 80). The proposed customer charges were designed to recover approximately the same share of the Schedule G customer cost of service as in the final rate design in the MECO test year 1999 rate Case. See MECO T-18 at 18-19, 49, 80. The Consumer Advocate stated that these proposals were generally consistent with its cost of service results and did not exceed customer charges found acceptable in settlement with HECO in Docket No. 04-0113 and should therefore be approved by the Commission. Final Settlement Letter, Exhibit 1 at 3-4; CA-T-5 at 45.

227. Schedule J is for general power service applicable to commercial customers with

loads greater than 5,000 kWh per month or greater than 25 kW, but less than 200 kW. MECO proposed Schedule J customer charges of $50 per month for single-phase service and $65 per month for three-phase service at Maui Division (MECO T-18 at 20), $45 per month for single-phase service and $60 per month for three-phase service at Lanai Division (MECO T-18 at 51), and $32 per month for single-phase service and $42 per month for three-phase service at Molokai Division (MECO T-18 at 81). The proposed customer charges were designed to recover approximately the same share of the Schedule J customer cost of service study results as in the final rate design for the MECO test year 1999 rate case. See MECO T-18 at 21, 51-52, 82. The Consumer Advocate agreed with the proposed Lanai and Molokai charges for Schedule J, but proposed to limit the Maui Division increase to $10 such that the Maui Division proposed Schedule J customer charges would be $45 per month for single-phase service and $60 per month for three-phase service. The Consumer Advocate's position was that the proposed customer charges for Maui Division were unacceptable when combined with the proposed demand charge increases, which would result in unacceptably large percentage bill increases to the smallest, low load factor Schedule J customers. CA-T-5 at 45-46. For the purpose of reaching a settlement on rate design issues in this proceeding, MECO accepted the Consumer Advocate's proposal for Schedule J customer charges at the Maui Division. Final Settlement Letter, Exhibit 1 at 4.

228. Schedule H is an end-use rate that applies to specific commercial electric loads, including commercial cooking, heating, air conditioning, and refrigeration loads. MECO proposed Schedule H customer charges of $40 per month for single-phase service and $55 per month for three-phase service at the Maui and Lanai Divisions (increases of $12.00 to $13.00 per month), while leaving the Schedule H customer charges at Molokai Division unchanged (MECO

T-18 at 23, 54, 85. The proposed customer charges are designed to recover less than the same share of the Schedule H customer cost of service, similar to the final rate design in the MECO test year 1999 rate case, in order to moderate the increase in the customer charge rates. Final Settlement Letter, Exhibit 1 at 4.

229. In its direct testimony, the Consumer Advocate stated that considering the higher unit customer costs to serve Schedule H (as shown on MECO-1810 at 1 and CA-501 at 1), the Company's proposal to close Schedule H to new customers and the Consumer Advocate's proposal to limit Schedule H demand charge increases (discussed below), the Company's proposed customer charge increases for Schedule H were reasonable. Final Settlement Letter, Exhibit 1 at 4; CA-T-5 at 46.

230. Schedule P is for general power service applicable to commercial or industrial customers with large power loads of at least 200 kW. MECO proposed to increase the Schedule P customer charge from $225 to $375 for the Maui Division (MECO T-18 at 25), with no changes in the Schedule P customer charge for the Lanai and Molokai Divisions. MECO T-18, at 56, 86. The proposed customer charge increase for the Maui Division is designed to recover less than the same share of the Schedule P customer cost of service as in the final rate design in the MECO 1999 test year rate case in order to moderate the increase in the customer charge. Final Settlement Letter, Exhibit 1 at 4-5; MECO T-18 at 26.

231. The Consumer Advocate recommended limiting the Maui Division Schedule P customer charge to $300 per month at this time to moderate the impact of rate changes upon the smallest Schedule P customers. CA-T-5 at 46. For purposes of reaching a settlement on rate design issues, MECO accepted the Consumer Advocate's proposal. Final Settlement Letter, Exhibit 1 at 5.

232. Commercial Rate Schedules – Demand Charges. MECO proposed the following increases to demand charges in Schedules J, H, and P

MECO PROPOSED DEMAND CHARGES (PER KW BILLED)						
	Maui		Lanai		Molokai	
Schedule	Existing	Proposed	Existing	Proposed	Existing	Proposed
J	$5.75	$12.00	$5.75	$9.00	$4.75	$11.00
H	$4.50	$7.00	$4.50	$8.00	$6.00	$10.00
P (0-500 kW)	$8.50	$18.00	$8.50	$22.00	$5.00	$11.00
P (≥501 kW)	$8.00	$17.00	$8.00	$20.00	$4.85	$10.00

Final Settlement Letter, Exhibit 1 at 5; MECO T-18 at 20, 23, 25; 51, 54, 56; 81, 85, 86-87.

233. The proposed demand charges were designed to recover a greater proportion of the demand costs through the demand charges rather than through energy charges, in order to align rates closer to their cost of service. Final Settlement Letter, Exhibit 1 at 5; MECO T-18 at 21, 24, 26.

234. In its direct testimony, the Consumer Advocate expressed concern about the impact of the proposed demand charge increases on lower load factor customers and recommended limiting demand charge increases to no more than 30% above the demand charges presently in effect so as to more gradually increase rates towards the indicated demand cost of service. CA-T-5 at 48-49. MECO was willing to limit the Schedule J and Schedule H demand charge increases to no more than 30% above the demand charges currently in effect and reduce its proposed demand charges for Schedule P by $2.00 per kW. For purposes of settlement, the Parties agreed on the following demand charges:

DEMAND CHARGES MECO-CONSUMER ADVOCATE AGREEMENT (PER KW BILLED)						
	Maui		Lanai		Molokai	
Schedule	Existing	Proposed	Existing	Proposed	Existing	Proposed
J	$5.75	$7.50	$5.75	$7.50	$4.75	$6.15
H	$4.50	$5.85	$4.50	$5.85	$5.85	$7.80

P (0-500 kW)	$8.50	$16.00	$8.50	$20.00	$5.00	$9.00
P (≥501 kW)	$8.00	$15.00	$8.00	$18.00	$4.85	$8.00

Final Settlement Letter, Exhibit 1 at 6.

235. Commercial Rate Schedules – Energy Charges. In its direct testimony, MECO proposed to recover in Energy Charges the part of the class revenue requirement that is not provided by the proposed customer and demand charges, net of all other adjustments. The Consumer Advocate agreed that this was a reasonable approach, subject to its proposed constraints regarding the need to gradually increase customer and demand charges. Final Settlement Letter, Exhibit 1 at 6; MECO T-18 at 21, 24, 26, 52, 55, 57, 83, 85, 87-88; CA-T-5 at 49.

236. Commercial Rate Schedules – Power Factor Adjustment. Large commercial customers with demands of 200 kW or more are subject to power factor adjustments based on their measured use of var-hours. Under current MECO rates, power factor adjustments are credits for power factors above 85% and surcharges for power factors below 85% (the breakpoint is 90% at Molokai Division). In its direct testimony, the Consumer Advocate recommended that MECO provide in its next general rate filing either: (a) Company-specific studies to support the Company's proposed power factor rate credits; or (b) an explanation as to how the results of analyses performed for HECO and HELCO can be applied to MECO's costs and power factor adjustment. CA-T-5 at 55. MECO agrees in its next rate filing to complete a MECO power factor study in support of revised power factor rate elements or explain how the results of a HECO or HELCO study would apply to MECO for such purposes. Final Settlement Letter, Exhibit 1 at 6.

237. Commercial Rate Schedules Schedule H. As HECO and HELCO have proposed in Docket Nos. 2006-0386 and 05-0315, respectively, MECO also proposed to close its only end-

used based Schedule H tariff to new customers as part of a plan to transition Schedule H customers to Schedules J and P. See MECO T-18 at 23, 54, 85-86. MECO is moving towards clearer distinctions between its commercial customers, and the number of Schedule H customers is relatively small compared to the number of Schedule G, Schedule J, and Schedule P customers. If any Schedule H customers remain at the time of the next MECO rate filing, the Consumer Advocate recommends that MECO be required to submit evidence of the continuing need for Schedule H or a plan for orderly migration of remaining Schedule H customers to other rate schedules. See CA-T-5 at 53-54. For purposes of settlement, the Company agreed to eliminate Schedule H in its rate design proposal in the next MECO general rate case. Final Settlement Letter, Exhibit 1 at 6-7.

4.

Other Revisions to Rate Schedules/Rule Changes

238. MECO also proposed the following rate schedule/rule changes:

(1) Increase Schedule G minimum charges to maintain the price differential between the customer charge and minimum charges that are in existing MECO rates. See MECO T-18 at 19, 49, 80.

(2) Modify the determination of billing demand in Schedule J for simplicity and ease of understanding. The proposed average demand ratchet is the same as the current demand ratchet in Schedule P, making the demand ratchet provisions for all of the demand rate schedules the same and consistent. See MECO T-18 at 22, 53, 84.

(3) Modify the Schedule J Availability Clause:

(a) to better define and clarify the load size that qualifies under Schedule J for ease of understanding and application;

(b) to make a clearer distinction between the medium-sized customers served under Schedule J, and the large power customers served under the Schedule P;

(c) to apply Schedule J to a more homogenous group of medium size commercial and industrial customers with similar load levels and characteristics, essential for designing more efficient pricing and costing, and facilitate aligning rates closer to cost of service; and

(d) to support rate and revenue stability and continuity

See MECO T-18 at 21-22, 52-53, 83.

(4) Modify the Schedule P Availability Clause to exclude all customers that would be served under Schedule J. See MECO-108 at 13; MECO-109 at 12; MECO-110 at 12.

(5) Close Schedule U to new customers because there are no customers on this rate. See MECO T-18 at 28, 59, 91.

(6) Close Schedule N at Molokai Division to new accounts. (Schedule N service is only available on Molokai.) See MECO T-18 at 88.

(7) Modify the terms and conditions of Rider T to allow customers to do emergency maintenance on their equipment without considering its impact on the customers' on-peak billing demand. See MECO T-18 at 30, 60, 92.

(8) Terminate the electric vehicle charging rates because there are no customers and there is no formal Commission approval to implement these riders. See MECO T-18 at 44-45, 75-76, 107-08.

(9) Offer four new time-of-use rate options in this case, Schedule TOU-R Residential Time-of-Use Service, Schedule TOU-G Small Commercial Time-of-Use Service, Schedule TOU-J Commercial Time-of-Use Service, and Schedule TOU-P Large Power Time-of-Use Service, in order to extend to all customers the opportunity to choose time-of-use rates, to establish a consistency in rate design for all time-of-use rate options, and to manage participation and collect data for future time-of-use rate designs, consistent with the proposals made in the HECO rate case Docket Nos. 04-0113 and Docket No. 2006-0386 and in HELCO rate case Docket No. 05-0315. MECO T-18 at 34-35, 65-66, 97-98.

(10) Modify the returned check charge, field collection charge, and service establishment charge based on the costs of the various activities. MECO T-18 at 108-10.

Final Settlement Letter, Exhibit 1 at 7-8.

239. In its direct testimony, the Consumer Advocate did not object to these proposals.

In particular, the Consumer Advocate stated the following in its direct testimony:

(1) The Consumer Advocate did not object to MECO's proposed changes to the commercial rate availability provisions and the Schedule J demand ratchet, which

were comparable to tariff changes proposed by HECO in Docket No. 04-0113. CA-T-5 at 50.

(2) The Consumer Advocate supported the Company's TOU rate proposal subject to MECO adjusting the final rate levels within the proposed TOU rates to maintain parity with the final sales rate levels ultimately approved by the Commission for the related basic sales rate schedules. CA-T-5 at 53.

(3) The Consumer Advocate stated that the proposed returned check charge, field collection charge and service establishment charge, were acceptable and were supported by detailed time and expense cost studies prepared by MECO and compared reasonably to price changes recently agreed upon by the Consumer Advocate for implementation by HELCO and HECO in Docket Nos. 05-0315 and 2006-0386. CA-T-5 at 57.

Final Settlement Letter, Exhibit 1 at 8.

240. Thus, the Consumer Advocate and MECO are in agreement regarding these other tariff and rule change matters. Final Settlement Letter, Exhibit 1 at 8.

F.

Act 162

241. As explained in the Parties' stipulated and final settlement letters, discussed above, there are no outstanding issues between the Parties in this docket. Thus, as discussed below, the only remaining issue in this docket is whether MECO's ECAC complies with the requirements of HRS § 269-16(g).

1.

Energy Cost Adjustment Clause and Act 162

a.

Introduction

242. On June 2, 2006, the Governor of Hawaii signed into law Act 162, which amended HRS § 269-16. Act 162, in part, states the following:

> Any automatic fuel rate adjustment clause requested by a public utility in an application filed with the commission shall be designed, as determined in the commission's discretion, to:
>
> (1) Fairly share the risk of fuel cost changes between the public utility and its customers;
>
> (2) Provide the public utility with sufficient incentive to reasonably manage or lower its fuel costs and encourage greater use of renewable energy;
>
> (3) Allow the public utility to mitigate the risk of sudden or frequent fuel cost changes that cannot otherwise reasonably be mitigated through other commercially available means, such as through fuel hedging contracts;
>
> (4) Preserve, to the extent reasonably possible, the public utility's financial integrity; and
>
> (5) Minimize, to the extent reasonably possible, the public utility's need to apply for frequent applications for general rate increases to account for the changes to its fuel costs.

Act 162, § 2, 2006 Hawaii Sess. Laws 640, 642-45, codified HRS § 269-16(g).

243. By Order 23496, the Commission amended the Parties' Stipulated Procedural Order by adding a third issue to this docket concerning "[w]hether MECO's ECAC complies with the requirements of HRS § 269-16(g)."

244. As explained on pages 12-14 of MECO T-19 and in National Economic Research Associates, Inc.'s ("NERA") *Report on Power Cost Adjustments and Hedging Fuel Risks*, filed December 29, 2006 in Docket No. 05-0315 (the "NERA Report"), MECO's ECAC complies with the statutory requirements of Act 162. The current level of ECAC fuel price risk-sharing is appropriate, and no change is necessary to the current ECAC risk-sharing approach.

245. The HECO Companies approached the issue of whether the ECAC complies with Act 162 by selecting a highly qualified consultant, NERA, to provide assistance in evaluating the extent to which the Companies currently comply with the requirements of Act 162. The NERA Report was received on December 28, 2006 and was submitted to the Commission on December

29, 2006 in Docket No. 2006-0386, HECO's 2007 test year rate case. MECO T-19 at 12.

246. In HELCO ST-23, Docket No. 05-0315 (HELCO's 2006 test year rate case), Dr. Jeff Makholm, Senior Vice President of NERA, explained the role of fuel adjustment clauses ("FACs") in utility ratemaking in the United States and analyzed whether the Companies' ECAC complies with Act 162.

247. In HELCO ST-24 of the same docket, Mr. Eugene Meehan, also a Senior Vice President at NERA, discussed the possibility of the Companies engaging in fuel price hedging and assessed the potential impact of fuel price hedging on the Companies, their customers, and the regulatory ratemaking process.

248. The NERA Report, HELCO ST-23, and HELCO ST-24 were incorporated by reference into MECO T-19 in this docket. MECO T-19 at 12.

249. FACs are prevalent throughout the U.S. Of the 32 traditionally regulated states, only Utah and Vermont lack FACs. Furthermore, the ECAC compares well to the FACs that are used in traditionally-regulated jurisdictions in the U.S. Nearly all traditionally regulated and most restructured states have some similar mechanism for power cost recovery with complete fuel cost recovery. Like the ECAC, most (about 22) of the 30 traditionally regulated states with fuel clauses have some form of true-up mechanism to reconcile actual and forecasted cost recovery. MECO T-19 at 13.

250. The current level of ECAC fuel price risk sharing is appropriate, and no change is necessary to the current ECAC risk sharing approach. The ECAC does not necessarily pass 100% of any change in fuel expenses to ratepayers. MECO's ability to recover its fuel expenses is subject to an efficiency factor, which measures how efficiently MECO converts fuel energy into electrical energy. If MECO cannot meet the efficiency factor embedded in the ECAC, it

recovers only a portion of its fuel expenses. Thus, MECO is already at risk for the non-recovery of some portion of fuel expense and this risk profile is inherent in the currently employed ECAC mechanism. See MECO T-19 at 13.

251. NERA has considered the use of fuel price hedging as a method to mitigate the risk of sudden or frequent fuel cost changes, and concluded that:

> (1) Even if rate smoothing is a desired goal, there may be more effective means of meeting the goal.
>
> (2) While [MECO] could partially hedge against oil price risk for periods of just over a year into the future, there would be considerable costs to doing so.
>
> (3) Were [MECO] to hedge, it would at best be able to partially hedge as there are considerable differences in price fluctuations between the hedges [MECO] could readily purchase and the cost of the oil it burns.
>
> (4) Were [MECO] to hedge, it would encounter periods during which it experienced gains on its hedges and other periods during which it experienced losses.
>
> (5) Hedging of oil by [MECO] would not be expected to reduce fuel and purchased power costs and, in fact, would be expected to increase the level of such costs.
>
> (6) It would not be reasonable for [MECO] to take the position of a principal and speculate in the oil market with shareholders assuming the risk of oil derivative gains and losses.

MECO T-19 at 14.

252. On October 20, 2008, the Governor of the State of Hawaii, the Department of Business Economic Development and Tourism, the Consumer Advocate and the HECO Companies executed the Energy Agreement which laid out a comprehensive set of actions to move Hawaii away from the use of imported fossil fuel for electricity and transportation and towards indigenously produced renewable energy and an ethic of energy efficiency. The parties to the agreement recognized the need to assure that Hawaii preserves a stable electric grid to minimize disruption to service quality and reliability and the need for a financially sound electric

utility, as both are vital components for achievement of an independent renewable energy future. See Energy Agreement at 1.

253. Although the Energy Agreement codified a wide range of commitments, projects and programs for the Companies, it did not specify any changes to the structure or the risk sharing formula of the Companies' ECAC. Rather, it called for the Commission to periodically review and approve the prudence and effectiveness of the Companies' fuel and energy procurement practices to ensure that the requirements of the ECAC are met and for the Commission to examine whether there is renewable energy which the utility did not purchase or whether alternate purchase strategies were appropriately used or not used. In fact, the Energy Agreement called for expanding the scope of energy adjustment clauses in Hawaii, stating that the Companies should be allowed to pass through reasonably incurred purchased power contract costs, including all capacity, O&M and other non-energy payments approved by the Commission (including those acquired under a feed-in tariff) through a separate surcharge, and the surcharge will be adjusted monthly and reconciled quarterly. It also stated that the Companies may engage in limited hedging and forward contracting for both energy and fuel, using guidelines and practices to manage both cost and risk, as approved by the Commission. Energy Agreement at 35-36.

b.

MECO's ECAC Complies with Act 162

254. On December 7, 2007, the Parties filed a Stipulated Settlement Letter, which documented agreements reached between the Parties in this rate case.

255. As stated in the Stipulated Settlement Letter, the Consumer Advocate concluded that the ECAC's fixed efficiency factors are an effective means of sharing the operating and

performance risks between MECO's ratepayers and shareholders and that the Company's ECAC provides a fair sharing of the risks of fuel cost changes between the Company and its ratepayers in a manner that preserves the financial integrity of the Company without the need for frequent rate filings. See CA-T-2 at 55-61; Stipulated Settlement Agreement, Exhibit 1 at 7.

256. The changes in the Company's fuel oil and fuel related costs and purchased energy costs from the fuel costs embedded in base rates are recovered through the ECAC. Based on the agreement to use MECO's production simulation model results, the Parties agree to use MECO's estimate of ECAC revenues of $179,160,300 for test year 2007 at present rates. MECO T-3, Attachment 1.

257. By division, the $179,160,300 in test year ECAC revenues for MECO Consolidated include $169,252,000 for Maui, $1,143,100 for Lanai, and $5,765,200 for Molokai. Stipulated Settlement Agreement, Exhibit 1 at 7.

258. At proposed rates, the Company is proposing to include the fuel additive costs for the Kahului units and DG fuel and transportation costs and associated revenue taxes under a new DG energy component in the ECAC. The Company is also proposing to include a weighted efficiency factor in its ECAC calculations (in the same manner as HELCO proposed in Docket No. 05-0315 and HECO proposed in Docket No. 2006-0386), based on fixed efficiency factors for IFO, diesel and "other" generating units. Because DG units are generally more efficient than other generating units, the Company proposes to not apply a fixed efficiency factor to DG fuel and transportation costs. See MECO T-19 at 5-10. The Consumer Advocate did not express any objections to the above proposals in its direct testimonies.

259. The Parties agree that no further changes are required to MECO's ECAC in order to comply with the requirements of Act 162. Stipulated Settlement Agreement, Exhibit 1 at 8.

260. Consistent with what the Parties agreed to in their September 21, 2007 letter filed in Docket No. 2006-0386, should the Commission issue an order with a different risk-sharing formulation under MECO's ECAC, this would not affect the test year revenue requirements agreed to by the Parties or the amount of interim rate relief and would not be the basis for any refund. Any change in the ECAC would be prospective. The ECAC recovers (or passes through) changes in fuel costs based on changes in the base rate fuel prices. Even if there was only partial pass through of changes in fuel costs after the new rates with a modified ECAC became effective, it would not impact the base rates set in this proceeding. Id.

261. The ECAC allows the utility to recover/return the difference between actual fuel and purchased energy costs and the fuel and purchased energy costs embedded in base rates, based on changes in the base rate fuel prices and purchased energy costs. In general, a risk-sharing formula would affect how and to what extent that difference between the base rate fuel prices established in this proceeding and the current fuel prices is recovered from or returned to ratepayers on a prospective basis. Id.

262. The estimate of test year revenues at proposed rates would not be affected by a change in the risk-sharing formula, because test year revenues at proposed rates are estimated with the ECA Factor equal to zero (which results from test year fuel and purchased energy costs being embedded in proposed base rates). Thus, there is no difference between the test year estimates of fuel and purchased energy costs at proposed rates and the fuel and purchased energy costs embedded in proposed base rates, and no differential amount to which an alternative risk-sharing mechanism would apply as it pertains to the revenue requirements and resulting proposed base rates that are authorized by the Commission in a final decision and order for the instant docket. Id.

263. The estimate of revenue at present rates should not be affected because MECO would prospectively change the calculation of the energy cost adjustment to reflect the alternative risk-sharing mechanism (if any) that is approved by the Commission in a final decision and order in this case.[24] Thus, a change in the risk-sharing formulation following a Commission final order in the rate case may affect the revenues recovered through the ECAC in the future, as a result of changes that would be necessary to future monthly ECAC filings. However, those future changes would not affect the level of interim rate relief nor create a basis for refunds. Id.

(1) Fuel Adjustment Clauses

264. FAC mechanisms (and other cost-adjustment mechanisms) give utilities a reasonable opportunity to recover their legitimate costs of procuring electricity on behalf of customers. By providing timely cost recovery for power costs, the amount of time between rate cases – called "regulatory lag" – can increase. Dr. Makholm stated that the three classic reasons for a FAC include:

(1) The purchased item (most commonly fuel) is outside the control of the buying utility.

(2) The item is a significant or large component of the utility's total operating costs.

(3) The cost changes with respect to that item can be volatile and unpredictable.

265. It is not necessary that individual cost items be large, volatile and unpredictable to qualify for FAC treatment. An effective FAC covers all purchased energy costs, including renewable sources, on an equal footing. HELCO ST-23 at 4.

266. With respect to the first reason for a FAC, utilities procure fuel from markets and would normally not have the ability to control the price set in those markets. Moreover, the

[24] As stated above, the Parties have agreed on certain changes to the ECAC, which would be made when the final rates approved in this docket take effect.

utility does not normally have the ability to control its customers' demand. It must procure the fuel and purchased power that are needed to meet customer demand as part of its obligation to serve. See HELCO ST-23 at 4-5.

267. With respect to the second reason for a FAC, fuel and purchased power costs continue to be a significant component of a utility's total operating costs. HECO's consolidated fuel and purchased power expenditures represented about 66.8 percent of expenses in 2005, up from 64.1 percent in 2004 and 62.0 percent in 2003. See HELCO ST-23 at 6.

268. With respect to the third reason for a FAC, changes in fuel and purchased power costs can be volatile and unpredictable. Although HECO is isolated from the wholesale electricity and natural gas markets, its primary source of fuel and purchased power expenses depend on the market price for oil, which constitutes about 79.3 percent of HECO's fuel mix. HELCO ST-23 at 7-8.

269. Dr. Makholm stated that FACs are prevalent throughout the U.S. Of the 32 traditionally regulated states, only Utah and Vermont lack FACs. In Hawaii, each of the utilities operates under a similar fuel clause, the ECAC. HELCO ST-23 at 8.

(2) MECO's ECAC

270. MECO's ECAC is an automatic adjustment provision in its rate schedules that allows the Company to automatically increase or decrease charges to reflect the change in the Company's energy costs of fuel and purchased energy above or below the levels included in the base charges without a rate proceeding. The purpose of the ECAC is (1) to address price changes in the Company's cost of fuel and purchased energy and (2) to accommodate changes to the actual mix of generation, DG and purchased energy resources, without the need for a rate case. MECO T-19 at 2.

271. The ECAC works as follows: A rate case proceeding determines the base electricity rates into which are embedded test year levels of fuel prices, payment rates for purchased energy and a test year resource mix. The ECAC mechanism, expressed in cents per kWh, allows the Company to recover costs due to subsequent changes in (1) fuel and purchased energy costs, (2) the resource mix between utility-owned generation, utility-DG and purchased energy, (3) the resource mix among the utility plants, and (4) the resource mix among purchased energy producers. Prior rate case proceedings established a fixed efficiency factor, or sales heat rate, for the utility central station generation to encourage efficient operation of the system units. An ECA Factor, which sets the rate adjustment that reflects these changes for the coming month, is filed with the Commission monthly. MECO T-19 at 2-3.

272. The efficiency factor in the ECAC is a measure of how efficiently MECO expects to convert the fuel burned in its generating units into a kWh measure of sales during the test year. It is expressed in million Btus per kWh. If the Company converts fuel into kWh more efficiently than this factor, it will get to keep the savings. But if the Company converts fuel into kWh less efficiently than this factor, it will not be able to recover the additional cost from customers. In effect, the efficiency factor acts as a standard which the Company must meet to avoid underrecovery of its fuel expense and provides an incentive for the Company to operate its units as efficiently as possible. See MECO T-1 at 24.

273. All costs that pass through the ECAC must result from fuel oil and purchased energy contracts and/or agreements that have been approved by the Commission. HAR § 6-60-6(2). In this manner, the Commission exercises its oversight of the costs passed through the ECAC.

274. The ECAC contains a quarterly reconciliation for the previous quarter's actual

experienced fuel and purchased power expenses on a per kWh basis relative to the forecasted amounts. This reconciliation ensures the timely recovery of fuel and purchased power costs for MECO. See HELCO ST-23 at 10.

275. MECO's ECAC compares well to the FACs that are used in traditionally-regulated jurisdictions in the U.S. Nearly all traditionally regulated and most restructured states have some similar mechanism for power cost recovery with complete fuel cost recovery. See HELCO ST-23 at 11.

276. The Company needs the ECAC because fuel costs are a large portion of its expenses and because fuel price levels are largely beyond the Company's control. In the test year, fuel and purchased energy expenses make up about 72% of total O&M expenses. This makes the Company's financial condition very sensitive to changes in fuel prices. The ECAC benefits the Company and its shareholders by:

(1) Limiting the swings in cash flow and earnings,

(2) Reducing the cost of capital,

(3) Improving the Company's ability to earn a fair return on investor capital, and;

(4) Providing a more timely recovery of fuel and purchased energy costs.

MECO T-1 at 23.

277. The ECAC also benefits customers by:

(1) Reducing the Company's financial risk and lowering the cost of capital. The resulting savings are passed on to MECO's customers through lower base rates in rate proceedings such as this one.

(2) Passing through to customers, the savings incurred when fuel prices fall below the prices embedded in base rates, to the same extent that they will incur additional costs when fuel prices are above the embedded fuel prices.

See MECO T-1 at 23.

(3) MECO's ECAC Complies with Act 162

278. Act 162 incorporates five requirements for the design of any public utility automatic rate adjustment.

(a) Fair Risk Sharing of Fuel Cost Changes Between the Public Utility and Its Customers

279. The current level of ECAC fuel price risk-sharing is appropriate, and no change is necessary to the current ECAC risk-sharing approach.

280. The current ECAC mechanism fairly shares the risk of fuel cost changes between the public utility and its customers. See HELCO ST-23 at 11-14. Fuel cost changes include fuel price changes and fuel efficiency changes. Under the existing ECAC, customers generally bear the risk of fuel price changes and shareholders generally bear the risk of fuel efficiency changes. Customers pay less when actual fuel prices decline, and customers pay more when actual fuel prices escalate. In establishing a fair rate of return on equity, the Company's current ECAC is assumed to continue. The concept that shareholders do not make any profit from fuel price changes is therefore embedded in the return on equity recommendation. MECO T-17 at 21.

281. The risk associated with meeting the efficiency factor is one that MECO, at least at this time, can address through the overhaul and maintenance of its generating units and unit commitment schedule among others. Thus, it is reasonable for the Commission to hold the Company responsible for not meeting the efficiency standard and for its fuel expenses to be subject to the risk of non-recovery as a result. See MECO T-19 at 13-14.

282. However, fuel prices are subject to market forces and geopolitical events that MECO cannot control. A risk-sharing mechanism that penalized the Company because prices increased above an expected base price, even one which provided a symmetric positive incentive when prices were below the base, would hold the Company financially responsible for events beyond its control. Such a risk-sharing mechanism would place the Company in an untenable

financial position, for which it is not compensated. Therefore, the current level of ECAC risksharing is appropriate, and no change is necessary to the current ECAC risk-sharing approach. See MECO T-19 at 14.

283. Dr. Makholm testified that partial pass-through mechanisms are rare and have been adopted for utilities with no existing FAC in place and should not be considered as a viable option for the sharing of fuel and purchased power costs in Hawaii. HELCO ST-23 at 29-30.

284. As Dr. Makholm noted, the potential costs associated with improperly assigning power cost recovery risk to the utility could harm the utility's financial health, its credit rating and its ability to raise capital from the financial markets. Accordingly, if a utility only partially recovers its power costs through its FAC, investors will require a higher return on their capital to reflect the riskier investment. While a partial pass-through of power costs may initially reduce the level of rates when unexpected fuel price increases occur, it will ultimately lead to higher costs to consumers. HELCO ST-23 at 14-15.

285. Thus, any new or modified fuel cost recovery mechanism that results in increasing investors' risks associated with fuel and/or purchased energy would require an increase in investor compensation through a higher cost of capital for bearing the increased risks. Customers would ultimately bear the higher costs for this increase in cost of capital. See HELCO ST-23 at 11-14.

286. Investors are very sensitive to financial strength considerations when they decide where to invest their money. If the Company's financial strength is not maintained, more risk averse investors will invest their money elsewhere. This in turn, will decrease demand for the Company's securities and raise its cost of capital, thereby hurting MECO's customers. HECO is currently rated BBB by Standard and Poor's ("S&P"), which is of particular concern because

that rating puts the Company only one notch above the minimum "investment grade credit rating". (S&P's rating of BBB- or higher is considered "investment grade".) Companies with credit ratings below "investment grade," or at junk bond status, find it difficult, if not impossible, to raise new capital. See generally MECO T-17 at 5-8; see also Docket No. 2008-0083, HECO T-20 at 10-12.

287. Increases to the Company's business risk profile and weakening of the Company's credit quality will negatively impact the Company's ability to obtain financing at a reasonable cost. This could hamper the Company's ability to finance new investments, to maintain and enhance existing facilities as well as to increase infrastructure to support further renewable development. The increased financing costs will increase the Company's revenue requirement and ultimately increase rates. See MECO T-17 at 4-36.

(b) Sufficient Incentive to Reasonably Manage or Lower Its Fuel Costs and Encourage Greater Use of Renewable Energy

288. The second condition required by Act 162 is that automatic rate adjustment mechanisms be designed to "[p]rovide the public utility with sufficient incentive to reasonably manage or lower its fuel costs and encourage greater use of renewable energy."

289. The second condition is closely tied to the first one. MECO's targeted efficiency factor promotes productive fuel use decisions and gives MECO an incentive to reasonably manage or lower its fuel costs. If MECO achieves more efficient plant performance than the level of the efficiency factor then it sees a reward. If MECO fails to meet this target for some reason, then MECO would not be able to recover the additional purchased fuel expenditures required to produce the kWhs. See HELCO ST-23 at 15.

290. Like purchasing fuel oil from the oil markets, purchasing energy from renewables is not without risks. To ensure the efficient use of renewable resources, the ECAC should cover

all purchased energy costs, including renewable sources, on an equal footing. Currently, the ECAC is adjusted each month for changes in the energy mix of the sources of fuel and purchased power. Under an equal footing structure, there is no disincentive from a cost recovery standpoint to purchase renewable energy. The encouragement of renewable energy above and beyond a treatment paralleling non-renewables (i.e., direct subsidization) is a matter of public policy and should not be confused with energy cost recovery. HELCO ST-23 at 15-16.

291. Dr. Makholm pointed out that a frequently updated and well-designed FAC mechanism also supports renewable resource development. The ECAC has positive financial implications and can improve a utility's credit ratings, thereby moderating the cost of capital borne by ratepayers. Because the utility serves as a counter-party for renewable energy companies, the credit standing of a utility frequently serves as an important determinant of renewable energy projects' ability to raise capital, and thus, improves reliability and resource diversity. Weakening the utility's credit rating through partial power cost recovery could harm renewable resources that rely on utility counter-party credit to support their investments. HELCO ST-23 at 16.

292. In addition, Dr. Makholm noted that, just as it is proper in the pursuit of economic efficiency for utilities to have incentives to efficiently manage costs over which they have control, economic efficiency is also served if ratepayers have a cost-based price signal. HELCO ST-23 at 17.

(c) Mitigating the Risk of Sudden or Frequent Fuel Cost Changes that Cannot Otherwise Reasonably be Mitigated through Other Commercially Available Means, such as Fuel Hedging Contracts

293. The third requirement under Act 162 requires "the public utility to mitigate the risk of sudden or frequent fuel cost changes that cannot otherwise reasonably be mitigated

through other commercially available means, such as fuel hedging contracts."

294. A utility can mitigate the risk of fuel cost changes through two forms of hedges: (1) Physical hedges, such as long-term supply and purchased power contracts and maintaining fuel inventories; and (2) Financial hedges. In HELCO ST-24, Mr. Meehan surveyed the potential financial hedging instruments that are available to the HECO Companies and their potential impacts.

295. Utilities do not hedge in order to obtain the best or lowest possible price for fuel because that would not be hedging, it would be speculating. Any fuel hedging program with the objective of "timing the market" and "buying low," is not a hedging program. Utilities have no specialized expertise in identifying trends in world oil markets and cannot be expected to predict market high and low points. That job is left to professional traders and speculators. A utility should not be asked to speculate on behalf of its customers. Moreover, a utility should not bear any financial risk or reward related to the timing of hedge execution. Utilities hedge to lock in a current market price and reduce fluctuations and not to minimize fuel acquisition costs. HELCO ST-24 at 16.

296. Mr. Meehan discussed the three hedging strategies that are commonly used by buyers of commodities, including forward or futures contracts, call option contracts and collars (which are portfolios containing call option contracts and put option contracts). See HELCO ST-24 at 19-22.

297. There are factors that can prevent hedging from achieving the goal of safe, adequate and reliable service at the lowest reasonable cost:

(1) The liquid forward and futures contracts that are traded in the marketplace do not extend beyond a term of 18 months. The most liquid (i.e., readily-available to

trade) fuel hedging contracts are contracts that cover time periods of up to six months into the future. Long-term hedging – i.e., hedging for more than one year in the future – cannot reasonably be achieved through commercially available fuel hedging contracts. HELCO ST-24 at 5-6, 23. Given this, price hedging should not be expected to address rate periods of more than one year at a time. HELCO ST-24 at 6, 8-9.

(2) Hedging does not provide for lower electricity prices. Locking in a price for oil today or at some fixed point for delivery in the future does not provide for a lower price, just a known price. The price locked in may well be higher than the price in the future at which MECO actually purchases oil. It only increases predictability, which may not be perceived as beneficial by all customers. See HELCO ST-24 at 4. The trade-off is an expected increase in rate stability at the cost of higher expected costs, as recognized by the National Regulatory Research Institute ("NRRI"):

> Hedging, in its purest form, does not provide a means to reduce the expected price of gas for a utility. Rather, from the consumers' perspective its primary function is to stabilize prices. Generally, risk-adverse consumers should be expected to pay extra for shouldering less risk, such as exposure to volatile prices.

HELCO ST-24 at 11-12 (citing Ken Costello, "Regulatory Questions on Hedging: the Case of Natural Gas," National Regulatory Research Institute, February 2002 at 17. Reprinted in Electricity Journal, May 2002 at 51).

In fact, customers can expect to pay more if MECO adopts fuel hedging. These costs are incremental to the fuel acquisition costs when fuel is not hedged. It is not at all clear that increased predictability is worth the extra costs. See HELCO ST-24 at 4, 7, 26.

(3) Hedging is imperfect. MECO could not buy derivatives that correspond exactly to the product that will be acquired. Mr. Meehan's review of the over-the-counter oil derivatives markets turned up no visible contracts for the specific fuels that are referenced in MECO's fuel supply contracts. This means that MECO would have to bear the basis risks or pay a premium to shift those risks to a third-party via a customized swap, which may be expected to increase average costs for customers. (Basis risk is the difference in price movement between the derivative used to hedge and the price movement in the product that will actually be bought.) See HELCO ST-24 at 9-10. In MECO's case, basis risk would be substantial because the indexes in MECO's oil contracts are not traded in the most liquid and transparent derivatives markets and because the closest substitutes are only traded in less liquid and less transparent derivative markets. Mr. Meehan also looked at several years of historic data and found that MECO would have a difficult time placing effective hedges. See HELCO ST-24 at 4-5, 22-23. In addition, the fuel hedging contracts that are available in the marketplace are for fixed quantities. MECO's customers would bear market risk exposure for incremental or decremental quantities relative to the fixed quantity that is hedged by MECO. See HELCO ST-24 at 24-25.

(4) If MECO engages in hedging, MECO may face credit risk. Market practice is to mark forward contracts to market and to collateralize the credit exposure embedded in forward contracts, which means that the value of the contract is

calculated every day and any exposure must be covered as margin. If MECO engages in hedging, counterparties may require that MECO provide collateral. The provision of collateral would add to the cost of hedging. Further, MECO would in most instances be exposed to the risk of counterparty default and nonperformance. See HELCO ST-24 at 25.

(5) The execution of fuel hedging contracts would expose MECO to liquidity risks. Liquidity is the ability to execute transactions in the marketplace. Markets that are highly liquid have active trading and many buyers and sellers. Market liquidity for oil derivatives ebbs and flows. See HELCO ST-24 at 25-26.

298. Mr. Meehan concluded that:

(1) While [MECO] could partially hedge against oil price risk for periods of just over a year into the future, there would be considerable costs to doing so. See HELCO ST-24 at 6.

(2) Based on his review of [MECO]'s existing physical fuel contracts and his review of available price hedging products in the marketplace, Mr. Meehan found that [MECO] would not be able to eliminate all of the risk of oil price fluctuations. This means that even if [MECO] were able to hedge the published assessment, the final cost of delivered oil would remain subject to residual price risks that could not be hedged. See HELCO ST-24 at 6, 9-10.

(3) Gains and losses are a natural part of hedging. Were [MECO] to hedge, it would encounter periods during which it experienced gains on its hedges and other periods during which it experienced losses. The gains in large part would be offset by increased fuel purchase costs and the losses in large part would be offset

by reduced fuel purchase costs. The ECAC framework would need to be revised so that the difference between the gains and increased fuel costs and the difference between the losses and reduced fuel costs were reflected in rates through the ECAC. See HELCO ST-24 at 6-7, 10-11.

(4) There are certain explicit costs to hedging, and if pursued, [MECO] would face new risks that it does not currently face. These risks and costs lead to fuel costs from hedging that can be expected on average to be higher.

(5) It would not be reasonable for [MECO] to take the position of a principal and speculate in the oil market with shareholders assuming the risk of oil derivative gains and losses. The motivation for hedging would be to provide rate stability for customers. [MECO] would thus be entering into hedges on behalf of customers, not on its own behalf. It is logical that customers bear the risks and rewards of hedging. Under the regulatory compact, shareholders bear certain risks and reap certain rewards. However, gains or losses on hedges that were entered into on behalf of customers under the direction of the Commission should not be the shareholders' responsibility. See HELCO ST-24 at 7, 12.

(6) Even if rate smoothing is a desired goal, there may be more effective means of meeting the goal. There is no compelling reason for [MECO] to use fuel price hedging as the means to achieving the objective of increased rate stability. See HELCO ST-24 at 6.

299. Mr. Meehan recommended that any exploration into hedging by [MECO] recognize the following:

(1) There is no business reason for [MECO] to hedge and the benefits to customers are unclear;

(2) Fuel (oil) hedging by [MECO] will be expected to result in increased customer costs and as such should only be seriously considered if there is a countervailing benefit;

(3) Fuel hedging by [MECO] may be able to reduce oil price-induced fluctuations in customer rates, but would not eliminate such fluctuations. While rate stability may be a countervailing benefit to the costs of hedging, hedging will provide, at best, more and not absolute rate stability;

(4) If fuel hedging were to be implemented, fuel hedging objectives would need to be developed in close consultation with regulators and customers and approved a priori as hedging by [MECO] on behalf of customers and not for [MECO]'s shareholders account; and,

(5) If [MECO] were to implement fuel hedging it should not speculate by attempting to time the market to minimize oil purchase costs. See HELCO ST-24 at 17.

(6) Limitations on [MECO]'s ability to hedge that are a function of marketplace realities and the implications of hedging on its financial position should be carefully considered. See HELCO ST-24 at 17.

300. Dr. Makholm stated that if there is a demand from customers and/or a mandate from the Commission acting on behalf of ratepayers, then recovery of the hedging and risk premium costs associated with physical and financial hedges should be included in the ECAC. However, there are other alternatives available, such as budget billing and fixed rate billing, that may provide the benefits sought through hedging programs (rate stability), and which would not

require pursuing these potentially costly options. HELCO ST-23 at 20-21.

(d) Preserving, to the Extent Reasonably Possible, the Public Utility's Financial Integrity

301. The fourth requirement of Act 162 is to "[p]reserve, to the extent reasonably possible, the public utility's financial integrity."

302. The design of the current ECAC mechanism preserves, to the extent reasonably possible, MECO's financial integrity. The current ECAC mechanism is a strength in MECO's business risk profile and contributes to the Company's financial integrity. The monthly timeliness of the existing ECAC also minimizes the recovery time period, further reducing investor uncertainty with respect to recovery of fuel costs.

303. Mr. Makholm testified that, a FAC generally, and HECO's ECAC specifically, preserves the financial integrity of a utility and HECO in particular. For modern utilities that operate in a world of volatile fuel prices, a FAC is critical to:

(1) Reduce the volatility of utility earnings. Companies exhibiting large earnings volatility are typically those with the most difficulty in tracking input costs.

(2) Provide the utility with a reasonable opportunity to recover its prudently-incurred costs in rates.

(3) Lower the risks to capital invested in a utility and thus lower the utility's cost of capital (and ultimately, rates) as well as help maintain the utility's credit rating. Volatile wholesale power and oil and gas commodity markets have led the rating agencies to more closely scrutinize cost-recovery mechanisms. Credit rating agencies, for example, recognize the need for robust and frequently updated FAC mechanisms. HELCO ST-23 at 21.

(4) Maintain MECO's ability to raise capital. Because oil and other fuel expenses are a large portion of MECO's operational costs, the ECAC is necessary because it allows MECO to raise capital at a reasonable cost in good markets and bad.

See HELCO ST-23 at 21-22.

304. Utility regulators have long recognized the crucial role that cost-recovery mechanisms play in allowing the utility an opportunity to recover its costs. FACs permit a utility to recover its costs and assure the capital markets that the company can meet its obligations to shareholders and bondholders. HELCO ST-23 at 22 (citing commission decisions from Colorado and Arizona).

(e) Continuation of the ECAC Will Allow MECO to More Readily Raise Capital in the Future, which Will Improve MECO's Ability to Meet Future Infrastructure Needs and Preserve the Level of Service Demanded by Its Ratepayers and the Commission.

305. The ECAC serves to reimburse MECO for prudently-incurred energy costs in a manner that minimizes the negative financial effects caused by regulatory lag. As Dr. Roger Morin, MECO's expert witness on the cost of common equity, explains in MECO T-16, "consideration of energy costs in a manner that lowers uncertainty and risk represents the mainstream position on this issue across the United States. Accordingly, the financial community relies on the presence of energy cost recovery mechanisms to protect investors from the variability of fuel and purchased power costs that can have a substantial impact on the credit profile of a utility, even when prudently managed." MECO T-16 at 65.

306. The record also indicates that bond rating agencies would place considerably more weight on the Company's purchased power contracts as debt equivalents in the absence of an ECAC, thus weakening the Company's financial integrity. The ECAC mitigates a portion of the risk and uncertainty related to the day-to-day management of a regulated utility's operations.

Conversely, the absence of such protection would be factored into the Company's credit profile as a negative element, which in turn would raise its cost of capital. MECO T-16 at 65.

307. Dr. Morin added that the "approval of energy cost recovery mechanisms by regulatory commissions is widespread in the utility business. Approval of fuel adjustment clauses, purchased water adjustment clauses, and purchased gas adjustment clauses has become widespread. All else remaining constant, such clauses reduce investment risk on an absolute basis and constitute sound regulatory policy." MECO T-16 at 66.

308. Ms. Sekimura, HECO's Financial Vice President, explained that MECO's investors view the Company's existing ECAC mechanism favorably, because it significantly reduces the risks associated with MECO's business. Dependence on imported fuel oil and the associated fuel price fluctuation are significant risks in MECO's business. The monthly revenue adjustment for fuel and purchased energy price changes results in timely recovery of fuel oil and purchased energy costs, which significantly reduces the business risk profile. Thus, the existing ECAC has a positive credit quality impact. MECO T-17 at 18.

309. S&P has often cited the existing ECAC mechanism as a strength in MECO's credit quality assessment. S&P has in the past cited "an excellent fuel adjustment clause" as strengthening credit quality in part offsetting "reliance on fuel oil," "significant purchased power obligations," and "high prices" which weaken credit quality. MECO T-17 at 18.

310. Conversely, the potential to have changes to the existing ECAC has raised concerns with the rating agencies as noted in S&P's credit assessment of HECO dated November 22, 2006. In its credit assessment of HECO dated November 22, 2006, S&P stated in part:

> Of some concern is Hawaii's Act 162, a new law which appears to confirm, in light of the state legislature's interest in promoting renewable energy, the PUC's ability to authorize the utility's fuel adjustment clause. Although no parties to the rate case seem to oppose the continuation of the clause, a material change to fuel

> adjustment mechanism would harm the company's financial condition and detract from its currently satisfactory business profile.

MECO T-17 at 17.

311. It is essential that the potential creditor and shareholder implications of any change to the ECAC be carefully and thoroughly considered before implementation. MECO T-17 at 24.

(f) <u>Minimizing, to the Extent Possible, the Public Utility's Need to Apply for Frequent Applications for General Rate Increases to Account for the Changes to Its Fuel Costs</u>

312. The fifth requirement of Act 162 is to "[m]inimize, to the extent possible, the public utility's need to apply for frequent applications for general rate increases to account for the changes to its fuel costs."

313. The design of the current ECAC mechanism minimizes, to the extent reasonably possible, the public utility's need to apply for frequent applications for general rate increases to account for the changes to its fuel costs.

314. Mr. Meehan testified that, in general, FACs are designed to reduce regulatory costs by separating the volatile fuel costs from the base rates. A prime motivation for FACs is a reduction in base rate cases. The reduction of frequent base rate cases does not reduce the Commission's oversight of MECO's fuel and purchased power expenditures. Electricity FACs can allow for recovery of narrowly-defined categories of fossil fuel costs, nuclear fuel costs, purchased power, fuel transportation costs, and hedging costs, among others. MECO submits calculations supporting the ECAC to the Commission for review on a monthly basis. <u>See</u> HELCO ST-24 at 23-24.

315. Ms. Sekimura explained that, currently, fuel price is not a driver for determining when a rate case is needed. If base rates are set at a time when fuel prices are relatively low, the

ECAC will be positive when fuel prices rise. Conversely, if base rates are set at a time when fuel prices are relatively high, the ECAC will be negative. See MECO T-17 at 22. For example, if MECO had had a rate case based on a 2000 test year and the base rates were established which incorporated the actual fuel price in 2000, the ECAC in 2001 and 2002 would have been negative and the ECAC in 2003 would have been positive.

316. The fuel oil prices used to establish base rates set the "base" in determining whether ECAC is positive or negative. Since under the current ECAC customers will bear nearly all the costs associated with fuel price changes, it does not matter what portion of the fuel cost is reflected in base rates and what portion gets reflected in the ECAC. In MECO's 1999 test year rate case (Docket No. 97-0346), the Company and the Consumer Advocate were able to agree on fuel price estimates, since the ECAC will adjust revenues to reflect the actual cost of fuel. MECO T-17 at 21-22.

317. Dr. Makholm stated that to further minimize regulatory costs, regulators can see that any other cost category that meets the three criteria for an automatic rate adjustment discussed in the background section of HELCO ST-23[25] receive parallel treatment to those costs already included in the ECAC. Cost categories to consider tracking separately include the following:

(1) All fuel and purchased power costs,

(2) Purchased capacity (especially considering the discussion of renewables),

(3) Hedging costs,

(4) Environmental compliance costs, and

(5) Any other costs specific to the jurisdiction that meet the three criteria discussed earlier.

[25] See HELCO ST-23 at 4-8.

HELCO ST-23 at 24.

318. The ECAC or a similar adjustment mechanism can be implemented efficiently for other costs that are large, volatile and beyond the control of the utility. Also, adjustment and cost tracking mechanisms may be implemented to allow for the parallel treatment of similar costs categories. For example, DSM costs provide a substitute for pursuing supply-side resources. If supply-side resources are recovered under a FAC, DSM costs could be treated symmetrically, which would treat supply- and demand-side energy costs on an equal footing. See HELCO ST-23 at 24-25.

c.

ECAC Summary

319. As explained above, MECO's current ECAC complies with the requirements of Act 162. Given the Energy Agreement between the HECO Companies and the Consumer Advocate, which documents a course of action to make Hawaii energy independent, and recognizes the need to maintain the Companies' financial health in order to achieve that objective, as well as the overwhelming support in the record for the ECAC in its current form, there appear to be no further issues regarding the ECAC to be resolved in this rate case.

III.

Ultimate Findings of Fact and Conclusions of Law

320. MECO and the Consumer Advocate propose the following Ultimate Findings of Fact and Conclusions of Law:

a. The operating revenues, operating expenses, and operating income for the 2007 test year, as set forth in Exhibit 1 of the Parties' December 7, 2007 Stipulated Settlement Letter reproduced as Exhibit 1 to this document are reasonable.

b. MECO shall not include the pension asset amortization amounting to $241,800 (net of an adjustment to ADIT reserve) in test year revenue requirements.

c. MECO's consolidated 2007 test year average rate base at present rates and approved rates is $383,123,000 and $382,968,000, respectively.

d. The capital structure for the test year is as follows: 1.27% short-term debt; 40.15% long-term debt; 2.45 % hybrid securities; 1.25% preferred stock; and 54.89% common stock. MECO's rate of return on common equity is 10.7%. A fair rate of return for the 2007 test year is results is 8.67%.

e. MECO is entitled to a final total rate increase that will produce a revenue increase of $13,222,000, or 3.7%, over revenues at present rates.

f. MECO's proposed cost of service, revenue allocation, and rate design, modified as discussed in paragraphs 296-316 are reasonable, and are therefore approved.

g. Final Commission approval for MECO to adopt the pension and OPEB tracking mechanisms approved on an interim basis in Interim Decision and Order No. 23926, as agreed by the Parties, is just and reasonable.

h. MECO's ECAC complies with Act 162 and should be implemented as the Company has proposed in its direct testimony MECO T-19 and as the Parties agreed, as explained in Parts II.B.1.b. (ECAC Revenues) and II.B.1.d. (Generation Heat Rate) above.

EXHIBIT 1

DOCKET NO. 2006-0387
MECO 2007 TEST YEAR RATE CASE

AGREEMENTS REACHED BETWEEN MECO AND THE CONSUMER ADVOCATE

SALES FORECAST AND REVENUES

1. Sales and Number of Customers

In its direct testimony, Maui Electric Company, Limited ("MECO" or "Company") explained that the Company's test year 2007 sales estimate was based on the MECO Sales and Peak forecast formally adopted in July of 2006. This sales forecast was based on a series of key assumptions derived from: (a) MECO's assessment of the economic outlook, known changes and future projects planned by significant customers, and (b) MECO's own historical customer and electricity use data. The results of five different forecasting methodologies were used to develop various elements of the Company's rate case customer count and KWH sales level projections by island for each customer class. The Company's test year projections were then compared to historical data for each island. (See MECO-T-2, pages 4-7 and MECO-201 - 204.)

MECO's total test year sales and customer count projections on a consolidated and island by island basis are as follows:

	Customer Count	MWH Sales	Source
Maui Division	60,694	1,212,929.0	MECO-201, page 2
Lanai Division	1,606	29,779.4	MECO-201, page 3
Molokai Division	3,141	36,548.2	MECO-201, page 4
Total Company	65,441	1,278,256.6*	MECO-201, page 1

* In presenting the MWH sales on MECO 201, page 1, MECO inadvertently did not recognize the 1,000 MWH normalization adjustment to Schedule P that is reflected on page 2 of MECO 201 for the MECO Division. Thus, the total MWH sales on a consolidated and MECO Divisional basis should be increased by 1,000 MWH. However, no adjustment is required to correct this inadvertent error because in computing the Company's test year revenue projections at present and proposed rates, MECO included the additional 1,000 MWH in the Schedule P sales for the Maui Division. As a result, the revenues associated with the 1,000 MWH normalization adjustment are reflected in the Company's test year revenue projections. (See MECO WP-302, page 113 of 150)

In its written testimony, the Division of Consumer Advocacy ("Consumer Advocate" or "CA") stated that based on its analysis of the information provided by MECO in the Company's updated response to CA-IR-209, the actual test year 2007 sales volumes through August appeared to be tracking very closely to the projected test year levels.

Thus, the Consumer Advocate determined that the Company's test year forecast appeared reasonable and did not propose an adjustment to the test year sales or customer count projections.

As a result, the Parties agreed to base the test year revenue requirement at present and proposed rates on the test year projections proposed by MECO.

ELECTRIC SALES REVENUES

2. Electric Sales Revenues at Present and Proposed Rates

The test year electric sales revenues at present rates are derived by multiplying the test year sales projections for each rate schedule by the current and proposed tariff rates. The projected revenues at present rates also include the revenues derived from the assessment of the Firm Capacity Surcharge and the Energy Cost Adjustment Clause ("ECAC") factor to reflect the monies collected to recover changes in fuel cost from the amount that was recognized in MECO's last rate proceeding.

In its direct testimony, using the sales projections presented by MECO T-2 and the ECAC factors presented in MECO-1904, MECO-1909, and MECO-1911, MECO calculated the following test year 2007 electric sales revenue at present rates and proposed rates. MECO's test year revenues at proposed rates are derived from MECO's proposed test year rate base, return on rate base, and expenses.

	Electric Sales Revenues MECO Test Year Estimate		
	Present	Proposed	Source
Maui Division	$333,075,200	$350,632,500	MECO-301
Lanai Division	$10,066,700	$10,597,400	MECO-301
Molokai Division	$12,631,400	$13,297,300	MECO-301
Total Company	$355,773,300	$374,527,200	MECO-301

The revenue for each customer class was presented on MECO-302 through MECO-304. The derivation of the projected revenues is shown on MECO-WP-302 through MECO-WP-304. The ECAC factors applied by MECO to the Company's test year sales projections are: $.13954 per kwh, $.13913 per kwh and $.15774 per kwh for the Maui, Lanai and Molokai Division, respectively.

In its written testimony, the Consumer Advocate recommended the following revenue projections for the 2007 test year.

Electric Sales Revenue Consumer Advocate Test Year Estimate		
	Present Revenues (000s)	Source
Maui Division	$332,916,000	CA-102, Schedule C, page 1

Lanai Division	$10,067,000	CA-103, Schedule C, page 1
Molokai Division	$12,631,000	CA-104, Schedule C, page 1
Total Company	$355,614,000	CA-101, Schedule C, page 1

The difference in the test year revenue projections at present rates is attributed to two differences. First, MECO inadvertently failed to revise the Company's test year revenue projection in the June 2007 update to account for the revenues associated with two customers that had executed contracts as of December 31, 2006 to receive service under the Maui Division's Schedule J, Rider T. As a result, the Consumer Advocate proposed an adjustment of $1,400 to reflect the reduced revenues associated with these two customers using the information provided by MECO as the basis for the adjustment. (See CA-T-3, pages 5-7, CA-101, Schedule C-2 and MECO's response to CA-IR-206, pages 2-3.) Second, the Consumer Advocate recommended the application of the following ECAC factors: (a) $.13941 per kwh for Maui Division, (b) $.13913 per kwh for the Lanai Division, and (c) $.15774 per kwh for the Molokai Division. (See CA-201, pages 1 through 3.) The As lower ECAC factor for the Maui Division resulted in a downward adjustment to the Company's test year revenue projection at present rates.

During the settlement discussions, MECO accepted the Consumer Advocate's proposed adjustment for the Maui Rider T participation since the Company acknowledged in response to CA-IR-206 that the test year revenues for the Maui Division should be revised to recognize the reduced revenues associated with the two customers on Schedule J, Rider T. In addition, as discussed in paragraph 5 below, the Parties have agreed to use the results of MECO's production simulation model, resulted in the Parties agreeing to use the ECAC factors set forth in MECO's direct testimony for purposes of calculating the 2007 test year revenues at present rates. The table below reflects the Parties' agreement on the test year consolidated electric sales revenue projection at present and proposed rates.

Electric Sales Revenue Settlement Test Year Estimate			
	Present	Proposed*	Source
Maui Division	$333,074,000	$343,062,000	Statement of Probable Entitlement, Exhibit 2, page 1
Lanai Division	$10,067,000	$11,921,000	Statement of Probable Entitlement, Exhibit 3, page 1
Molokai Division	$12,631,000	$13,792,000	Statement of Probable Entitlement, Exhibit 4, page 1
Total Company	$355,772,000	$368,775,000	Statement of Probable Entitlement, Exhibit 1, page 1

* The proposed revenues shown here are based upon revenue requirements at equal rates of return for each Division. As noted in paragraph 33 below, MECO and the Consumer Advocate are addressing cost of service/rate design issues separately

and intend to make a later submission covering these subjects. It is expected that the proposed revenue distribution among divisions will not strictly apply cost of service results and will, therefore, not result in proposed revenues for Lanai and Molokai as large as are presented here.

OTHER OPERATING REVENUES

3. Other Operating Revenues at Present and Proposed Rates
The test year projection for Other Operating Revenues represent the monies collected in accordance with MECO's: (a) Tariff Rule No. 8 (specifically, field collection, returned check and late payment charges) (i.e., Account No. 450); (b) Tariff Rule No. 7 (service establishment charges) and Tariff Rule No. 12 (temporary facilities charges) (i.e., Account No. 451); and (c) rental of electric properties (street light fixtures, poles and transformers) (i.e., Account No. 454).

In its direct testimony, MECO's projected consolidated test year Other Operating Revenues at present and proposed rates was $1,535,000 and $1,759,000, respectively. The Company's projections were based on either recorded averages, historical trends, adjusted for special situations, or recent changes that will result in material impacts. (See MECO T-7, page 49-50 and MECO-712.)

In its direct testimony, the Consumer Advocate accepted the Company's consolidated test year estimate of $1,535,000 at present rates (CA-101, Schedule C) because the Consumer Advocate concluded that such amounts were reasonable based on the Consumer Advocate's analysis of MECO's projection (see CA-T-3, page 9).

The Company's projection of $1,759,000 at proposed rates (consolidated), however, required adjustment to reflect, for certain of the Company's proposed tariff changes, the projected Other Operating Revenues associated with the Consumer Advocate's test year revenue requirement recommendation for each Division. For example, at Schedule A-1 of CA-101 through CA-104, the Consumer Advocate calculated the late payment fee at proposed rates using a 1.1507% rate for all islands, based on the percentage rate in MECO-WP-2001, page 26 applied to the Consumer Advocate's recommended test year revenue requirement for each Division. Furthermore, the Consumer Advocate found reasonable certain of MECO's proposed tariff changes. (See discussion in CA-T-5, pages 57 through 58.) As a result, the Consumer Advocate proposed to increase the Company's consolidated test year Other Operating Revenue projection at present rates by $224,000 to reflect the proposed amounts in the Consumer Advocate's test year revenue requirements.

During the settlement discussions, MECO explained that in calculating the Company's test year revenue requirements, the late payment fees were based on specific percentages for each Division (i.e., 0.09%, 0.11% and 0.17% for the Maui, Lanai and Molokai Division, respectively). Based on this representation, the Consumer Advocate agreed to use the island specific late payment charge percentage factors in place of the fixed percentage of 1.1507% to more accurately account for late payment revenues at proposed rates for each island. As a result, the Parties agreed to compute the late payment fees at proposed rates for the test year by multiplying a late payment charge factor of 0.09% for the Maui Division, 0.11% for the Lanai Division, and 0.17% for the Molokai Division as proposed by MECO (see MECO T-7, page 55). In addition, the Parties agreed that the balance of the other operating revenue (excluding late payment fees) at proposed rates will include an increase of $207,000 over present rates for the increase in the field collection charge, returned check charge, service establishment charge and reconnection charge.[1] The result is a consolidated test year revenue projection at proposed rates of $1,754,000, consisting of $1,585,000 for the Maui Division, $47,000 for the Lanai Division and $122,000 for the Molokai Division.

EXPENSES

FUEL AND PURCHASED POWER EXPENSE AND RESULTING ECAC REVENUES AT PRESENT RATES AND COMPLIANCE WITH ACT 162

4. The table below reflects the test year consolidated fuel oil, fuel related and purchase power expense projections set forth by MECO and the Consumer Advocate in written testimony. The amounts reflected the results of a production simulation model used by MECO and the Consumer Advocate to determine the optimal dispatch of available generation to meet the test year energy requirements. The energy requirements represent the energy needed to produce the test year sales projection, company use projection and losses in the transformation and delivery.

	MECO Direct	Consumer Advocate Direct	Difference	%Difference
ECAC Revenues	$179,160,000	$179,003,000	$ (157,000)	-0.09%
Fuel Oil Expense	$179,945,000	$179,292,000	$(653,000)	-0.36%
Fuel Related Expense	$520,000	$519,000	$(1,000)	-0.19%
Total Fuel Expense	$180,465,000	$179,811,000	$(654,000)	-0.36%
Purchase Power Expense	$33,982,000	$33,988,000	$6,000	0.02%

Reference: MECO-401; MECO-507; CA-201; CA-101, Schedule C-3; MECO T-3, Attachment 1.

Both MECO and the Consumer Advocate used the same inputs and production simulation program (P-Month) to derive their respective test year fuel oil and related fuel expense and purchase power projections. However, since the Consumer Advocate used a different version of P-Month, the Consumer Advocate's results differed slightly from MECO as noted in the above table.

1 See MECO-712, page 1. $1,759,000 - $1,535,000 = $224,000 – ($313,000 - $296,000) = $207,000.

5. Fuel Oil and Fuel Related Expense

The test year fuel oil expense represents the costs of operating the Company's generation as determined in the production simulation model. The amount is derived by multiplying the estimated test year fuel consumption (in barrels) at each of MECO's generating plants by the fuel prices for each type of fuel consumed at the plant.

During the settlement discussions, MECO and the Consumer Advocate agreed to use MECO's production simulation results since MECO's model has been customized to better reflect the actual operations of the Company. Based on this agreement, the Parties agreed that the test year estimate of fuel expense, including fuel oil expense and fuel related expense is $180,465,000 for MECO consolidated, including $167,037,000 for the Maui Division, $6,175,000 for the Lanai Division, and $7,253,000 for the Molokai Division. (See MECO-401.)

6. Purchased Power Expense

As noted in paragraph 5 above, the Parties agreed to use the results of MECO's production simulation, resulting in a test year estimate of $33,982,000 for MECO's purchase power expense, which includes $32,143,000 for purchased energy and $1,839,000 for firm capacity. (See MECO-507.) The purchase power expense projection only applies to Maui Division.

7. Generation Efficiency Factor (Sales Heat Rate)

As a result of the production simulation modeling that is done to determine the test year fuel and purchased power expense, a new fixed efficiency factor is determined for purposes of the ECAC factor that will be applied on a prospective basis, once the Commission authorizes new base rates. Based on the Parties' agreement to use the results of MECO's production simulation model, the Parties agree that the sales heat rates used in the ECAC as the fixed efficiency factors at proposed rates are:

	Efficiency Factor (mmbtu/kwh)		
	Maui	Lanai	Molokai
Industrial Fuel Oil	0.015311	0.000000	0.000000
Diesel	0.009460	0.010577	0.010823
Other	0.010648	0.010577	0.010823

Reference: MECO Direct Testimony, MECO-1906, page 1, MECO-1910, page 1, MECO-1912, page 1.

In addition, to derive the above, MECO applied a calibration factor based on the 2005 operations to its production simulation results to adjust the fuel consumption results for actual operating conditions that cannot be completely duplicated by the computer model. Based on the observation that the 2005 energy generation mix is very similar to the energy generation mix projected for the 2007 test year, the Consumer Advocate concluded that applying the 2005 calibration factor as proposed by MECO is appropriate for this proceeding. The Consumer Advocate recommended, however, that MECO continue to be required to provide annual calibration reports to allow the Commission and Consumer Advocate an opportunity to monitor the difference between the estimated and actual results produced from the use of the production simulation model. (See CA-T-2, pages 19-20.) MECO agrees to file annual reports on its calibration factor.

8. ECAC Revenues

The changes in the Company's fuel oil and fuel related costs and purchased energy costs from the fuel costs embedded in base rates are recovered through the ECAC. Based on the agreement to use MECO's production simulation model results, the Parties agree to use MECO's estimate of ECAC revenues of $179,160,300 for test year 2007 at present rates (MECO T-3, Attachment 1, attached hereto). The test year ECAC revenues for the MECO Divisions are as follows:

Division	2007 TY ECAC Revenues
Maui	$169,252,000
Lanai	$4,143,100
Molokai	$5,765,200
MECO Consolidated	$179,160,300

At proposed rates, the Company is proposing to include the fuel additive costs for the Kahului units and distributed generation ("DG") fuel and transportation costs and associated revenue taxes under a new DG energy component in the ECAC. The Company is also proposing to include a weighted efficiency factor in its ECAC calculations (in the same manner as HELCO proposed in Docket No. 05-0315 and HECO proposed in Docket No. 2006-0386), based on fixed efficiency factors for industrial fuel oil ("IFO"), diesel and "other" generating units. Because DG units are generally more efficient than other generating units, the Company proposes to not apply a fixed efficiency factor to DG fuel and transportation costs. (see MECO T-19, pages 5-10.) The Consumer Advocate did not express any objections to the above proposals in its direct testimonies.

9. Act 162 Compliance

MECO stated that its ECAC complies with the statutory requirements of Act 162 and the current level of ECAC fuel price risk-sharing is appropriate, and that no change is necessary to the current ECAC risk-sharing approach (see MECO T-19, pages 12-14; *Report on Power Cost Adjustments and Hedging Fuel Risks*, pages 3-9, 30, filed December 29, 2006 in Docket No. 05-0315, incorporated in this proceeding by reference in MECO T-19, page 12).

In CA-T-2 (pages 55-61), the Consumer Advocate concluded that the ECAC's fixed efficiency factors are an effective means of sharing the operating and performance risks between MECO's ratepayers and shareholders and that the Company's ECAC provides a fair sharing of the risks of fuel cost changes between the Company and its ratepayers in a manner that preserves the financial integrity of the Company without the need for frequent rate filings.

Based on the above, the Parties agree that no further changes are required to MECO's ECAC in order to comply with the requirements of Act 162.

Further, consistent with what the Parties agreed to in their September 21, 2007 letter filed in Docket No. 2006-0386, should the Commission issue an order with a different risk-sharing formulation under MECO's ECAC, this would not affect the test year revenue requirements agreed to by the Parties or the amount of interim rate relief and would not be the basis for any refund. Any change in the ECAC would be prospective. The ECAC recovers (or passes through) changes in fuel costs based on changes in the base rate fuel prices. Even if there was only partial pass through of changes in fuel costs after the new rates with a modified ECAC became effective, it would not impact the base rates set in this proceeding.

By way of further explanation, the ECAC allows the utility to recover/return the difference between actual fuel and purchased energy costs and the fuel and purchased energy costs embedded in base rates, based on changes in the base rate fuel prices and purchased energy costs. In general, a risk-sharing formula would affect how and to what extent that difference between the base rate fuel prices established in this proceeding and the current fuel prices is recovered from or returned to ratepayers on a prospective basis.

The estimate of test year revenues at proposed rates would not be affected by a change in the risk-sharing formula, because test year revenues at proposed rates are estimated with the ECAC factor equal to zero (which results from test year fuel and purchased energy costs being embedded in proposed base rates). Thus, there is no difference between the test year estimates of fuel and purchased energy costs at proposed rates and the fuel and purchased energy costs embedded in proposed base rates, and no differential amount to which an alternative risk-sharing mechanism would apply as it pertains to the revenue requirements and resulting proposed base rates that are authorized by the Commission in a final Decision and Order for the instant docket.

Furthermore, the estimate of revenue at present rates should not be affected because MECO would prospectively change the calculation of the energy cost adjustment to reflect the alternative risk-sharing mechanism (if any) that is approved by the Commission in a final decision and order in this case.[2] Thus, a change in the risk-sharing formulation following a Commission final order in the rate case may affect the revenues recovered through the ECAC in the future, as a result of changes that would be necessary to future monthly ECAC filings. However, those future changes would not affect the level of interim rate relief nor create a basis for refunds.

PRODUCTION O&M EXPENSES

2 As stated above, the Parties have agreed on certain changes to the ECAC, which would be made when the final rates approved in this docket take effect.

10. Production O&M Expense

MECO incurs significant non-fuel Production Operations and Maintenance ("O&M") expenses to operate and maintain the Company's generating facilities that are located at the Kahului and Maalaea Power Plants and at Hana on the island of Maui, Miki Basin on the island of Lanai and Palaau on the island of Molokai. The Production O&M expenses are recorded in National Regulatory Utility Commission ("NARUC") Account Nos. 500 through 557. The costs charged to these accounts comprise employee labor, materials, contract labor, engineering, environmental and other administrative function and service costs.

In its direct testimony, MECO's consolidated test year 2007 normalized production O&M expense projection was $21,014,800,[3] including $18,741,800 for the Maui Division, $1,094,400 for the Lanai Division, and $1,178,600 for the Molokai Division. (See MECO-502.) These amounts are comprised of operation and maintenance expenses as noted in the following table.

	Operation	Maintenance	Total Production O&M
Maui Division	$8,314,500	$10,427,300	$18,741,800
Lanai Division	$664,500	$429,900	$1,094,400
Molokai Division	$695,100	$483,500	$1,178,600
Total Company	$9,674,200	$11,340,700	$21,014,800

Subsequently, in its June 2007 Update for MECO T-5, Attachment 1, filed on July 3, 2007, MECO increased its test year Production O&M expense projections by $471,558, consisting of $57,724 and $413,834 in labor and non-labor costs. The $471,558 adjustment was intended to recognize the additional expenses that were anticipated to be billed by HECO for support from the new HECO Power Supply Competitive Bidding Division. These expenses included MECO's allocated share of the additional labor costs for staff additions to HECO's new division, as well as additional costs that are anticipated to be incurred through the year 2009. The adjustment resulted in an updated consolidated test year production O&M expense projection of $21,487,000 (i.e., $21,014,800 + $471,600 = $21,486,400 rounded.) (See MECO response to CA-IR-304, Attachment A, page 1.)

In its direct testimony, the Consumer Advocate recommended the following production O&M expense projections:

	Operation	Maintenance	Total Production O&M

3 The normalized test year Production O&M expense reflected an adjustment of approximately $3.4 million to, among other things, primarily remove from the Company's 2007 budget, costs that MECO believes are associated with higher than normal overhaul work activities anticipated to be performed in the 2007 test year. The basis for this normalization adjustment is discussed in MECO T-5 at pages 23-25 and reflected on MECO 505.

Maui Division	$8,172,000	$10,349,000	$18,521,000
Lanai Division	$615,000	$429,000	$1,044,000
Molokai Division	$682,000	$482,000	$1,164,000
Total Company	$9,469,000	$11,260,000	$20,729,000

In determining the above, the Consumer Advocate agreed with MECO's normalization of the generating overhaul costs for purposes of determining the 2007 test year revenue requirement (see MECO-WP-505) based on the determination that the calculations set forth by MECO reflected a systematic and rational approach to developing an adjusted normal overhaul expense level of ratemaking purposes. The Consumer Advocate concluded, however, that some of the other ratemaking adjustments proposed by MECO to reclassify, restate or normalize the 2007 budgeted amounts for fuel additives, biodiesel, lube oil and Nitrogen Oxide ("Nox") water expenses required revisions. In addition, the Consumer Advocate concluded that the Company's adjustment to reflect the increased allocation of costs from HECO for competitive bidding support was not reasonable. As a result, the Consumer proposed the following six adjustments to MECO's normalized test year estimate of production O&M expense. (See CA-T-3, pages 18 – 19.)

- a labor adjustment to remove the costs associated with new employee positions that have not been filled for the entire 2007 test year (see CA-T-3, pages 20 -22 and CA-101, Schedule C-13);
- an adjustment to reduce the estimated non-labor consulting and legal expenses expected to be incurred by HECO to support competitive bidding activities on behalf of MECO (see CA-T-3, pages 22-27 and CA-101, Schedule C-4);
- an adjustment to correct an error in the Company's lube oil consumption rate and to reflect the last known actual prices of lube oil in computing the test year expense estimate (see CA-T-3, pages 27-24 and CA-101, Schedule C-5);
- an adjustment to normalize the structural maintenance expense for the Kahului station (see CA-T-3, pages 28-32 and CA-101, Schedule C-6);
- an adjustment to update and refine the normalization adjustment proposed by MECO for the water treatment expenses incurred to purify water used for Nox emission control at the Maalaea station (see CA-T-3, pages 32-34 and CA-101, Schedule C-7); and
- an adjustment to normalize the test year emission fee expense amount for ratemaking purposes based upon the actual expense incurred in prior years (see CA-T-3, pages 35-37 and CA Schedule C-8).

For purposes of settlement, MECO and the Consumer Advocate have reached agreement on all six of the above adjustments, either accepting or revising each Consumer Advocate adjustment as described in greater detail below. The result is a test year 2007 other production O&M expense of $20,848,000 for MECO consolidated, including $18,639,000 for the Maui Division, $1,045,000 for the Lanai Division, and $1,164,000 for the Molokai Division.

	Operation	Maintenance	Total Production O&M
Maui Division	$8,350,000	$10,289,000	$18,639,000
Lanai Division	$616,000	$429,000	$1,045,000
Molokai Division	$682,000	$482,000	$1,164,000
Total Company	$9,648,000	$11,200,000	$20,848,000

a. <u>Payroll Expense Adjustment</u>

In its direct testimony, MECO proposed to include $3,902,300 of production labor expense in the 2007 test year. This amount reflects the costs associated with three new employees (i.e., a Senior Helper at the Kahului Power Plant, an Electrician at the Maalaea Power Plant, and an Operator Helper at the Lanai Power Plant). As a result, the 2007 test year Production O&M Labor expense reflects the payroll costs associated with a staff of 123 employees for the entire 2007 test year, as compared to 121 employees in 2005. (See MECO-1102 and MECO T-5, page 17 and 36.)

In its written testimony, the Consumer Advocate raised a concern with MECO's assumption that the Company would be fully staffed for the entire 2007 test year. As discussed in CA-T-3 and CA-T-1, the Consumer Advocate maintained that there is no factual support for MECO's assumption that it will never experience vacancies in its workforce. Furthermore, the Consumer Advocate further maintained that it would be inappropriate to recognize MECO's higher forecast level of employees for ratemaking purposes because 1) it is common for employee vacancies and the hiring of new employees to result in overall headcount levels that fluctuate from month-to-month, and 2) it would be highly inconsistent and improper to intentionally set utility rates on an overall cost of service that fixes employee counts at a hypothetical end-of-period forecast level, while not similarly and consistently annualizing customer growth, changes in energy usage or changes in other expenses that are expected to occur in the forecast year. As a result, the Consumer Advocate proposed a consolidated Production O&M labor expense adjustment of $196,368 to reduce MECO's test year expense estimate for the labor costs associated with 2.5 employee positions. The proposed adjustment was based on the simple average of the Company's actual number of Production employees at the beginning and forecasted employee count at the end of the test year (i.e., December 31, 2006 and December 31, 2007, respectively). The adjustment reduced MECO's Production O&M labor expense projection for the Maui, Lanai and Molokai Divisions by $153,076, $42,274, $1,018, respectively. It should also be noted that the payroll adjustment (i.e., CA Adjustment C-13) encompassed all MECO expense account blocks, including transmission and distribution, customer service, customer accounts, and administrative and general. The settlement of the specific adjustment proposed for transmission and distribution, customer service, customer accounts, and administrative and general will be discussed in each respective section below.

During the settlement discussions, the Company represented that an employee was offered and accepted employment in December 2006, but began employment on January 3, 2007 for RA "MGD." In addition, since the position was filled in January of

2007, MECO represented that the level of employees for RA "MGD" remained at a minimum of 21 employees through September 2007 (see response to CA-IR-112, updated September 2007, Attachment A, page 7). Based on the above, MECO proposed to reduce the Consumer Advocate's Production labor expense adjustment by $40,257 (see MECO T-11 Attachment 3(AAA) attached hereto) to reflect this employee's compensation in determining the test year labor costs. After reviewing the information provided by MECO, the Consumer Advocate agreed to revise its adjustment to reflect the compensation for 2.0 employees (versus the 2.5 employees upon which the Consumer Advocate based its $196,368 adjustment), recognizing that the MGD position was already included in MECO's forecast employee count at test year end. The result is a revised adjustment of $156,111, including $112,819 for the Maui Division, $42,274 for the Lanai Division, and 1,018 for the Molokai Division (see MECO T-11, Attachments 3, 3(AA) and 3(A), attached hereto). For purposes of settlement, MECO agrees to accept the Consumer Advocate's revised adjustment.

b. <u>Competitive Bidding Expense</u>
As noted above, MECO increased its 2007 test year estimate for other production O&M by $471,558 to include the additional costs associated with competitive bidding activities. The $471,558 projection is comprised of $57,724 for labor (i.e., $52,839 + $4,885 = $57,724) and $413,834 for non-labor costs that are billed by HECO as compensation for the competitive bidding support activities performed on behalf of MECO. (See MECO response to CA-IR-317, Attachment A, page 1; June 2007 Update, MECO T-5, Attachment 1.)

In direct testimony, the Consumer Advocate did not object to the inclusion of the additional labor expenses for staffing additions that are occurring in connection with the reorganization and creation of HECO's Power Supply System Planning Department, as explained in MECO's response to CA-IR-317, Attachment A. The Consumer Advocate noted that the newly created positions have either been or will be filled by mid-year, and MECO has included the labor costs associated with these positions using a half-year convention, which is consistent wit the Consumer Advocate's approach to averaging the labor costs for new staff positions. The Consumer Advocate maintained, however, that MECO had overstated the additional non-labor expenses that will be incurred in 2007 for competitive bidding activities because MECO's projection is based on the average costs anticipated to be incurred in 2007, 2008 and 2009. The Consumer Advocate contended that MECO's proposal to include costs that will be incurred outside the test year in determining the test year competitive bidding expense is not reasonable and violates the test year concept. (See CA-T-3, pages 24-25.) As a result, the Consumer Advocate proposed an adjustment of $275,684 to reduce MECO's test year 2007 non-labor competitive bidding expense, resulting in a test year non-labor estimate of $138,150 (i.e., $413,834 - $275,684) to be billed by HECO. The Consumer Advocate's adjustment is based on the updated 2007 estimate of $276,300 provided in MECO's response to CA-IR-317, Attachment A, page 3, reduced by 50% to reflect the costs that are billed to MECO, or $138,150. (See CA-T-3, page 27; CA-101, Schedule C-4.)

For purposes of settlement, MECO accepts the Consumer Advocate's proposed adjustment, resulting in a total test year competitive bidding expense allocation from HECO of $195,874, comprised of $57,724 for labor and $138,150 for non-labor costs.

c. Lube Oil Expense

In its direct testimony, MECO's consolidated test year estimate for lube oil expense was $1,036,942, including $915,524 for the Maui Division, $47,344 for the Lanai Division, and $74,074 for the Molokai Division. (See MECO-509, page 1.) These amounts include lube oil required for MECO's diesel generating units as well as its combustion turbine ("CT") units.

The Consumer Advocate proposed to reduce MECO's test year 2007 lube oil expense for its diesel units by $146,048 to correct an error made by MECO in calculating the lube oil consumption rates for the Mitsubishi diesel units as shown in the response to CA-IR-217, Attachment 1 and to reflect the last known actual unit prices. The $146,048 represents an adjustment of $133,708, $4,135, and $8,205 to the Maui, Lanai and Molokai Divisions, respectively and is based on information provided by MECO in the Company's confidential response to CA-IR-326. (See CA-T-3, pages 27-28; CA-101, Schedule C-5.)

MECO accepts the Consumer Advocate's proposed adjustment, resulting in a consolidated test year estimate of $890,894, consisting of $781,816, $43,209, and $65,869 for the Maui, Lanai and Molokai Divisions, respectively.

d. Kahului Power Plant Structural Maintenance Expense

In its direct testimony, MECO included $329,597 for Kahului Power Plant structural maintenance expense. (See MECO response to CA-IR-226, Attachment 1, page 2.) These expenses reflect the costs of performing periodic inspections, painting and repairs to the building and other structures at each generating station. These activities and costs tend to fluctuate from year-to-year since discrete large structural maintenance activities occur occasionally on an as-needed basis.

The Consumer Advocate observed that MECO analyzed the historical expenditure levels for structural station-wide maintenance activities at the Maalaea and Palaua stations and calculated a normalized expense amount for ratemaking purposes as shown on MECO-WP-504f and MECO-WP-504g. The Company did not, however, perform the same type of analysis for the structural maintenance activity costs for the Kahului Power Plant. As a result, the Consumer Advocate proposed an adjustment of $78,146 to reflect a normalized Kahului Power Plant structural maintenance expense, as reflected in MECO's response to CA-IR-226, Attachment 1, page 2. (See CA-T-3, pages 28-32; CA-101, Schedule C-6.)

During the settlement discussions, MECO explained that the Company's test year projection of $329,597 for structural maintenance at the Kahului Power Plant ("KPP") was reasonable for the following reasons:

1) The 2007 recorded expense for KPP structural maintenance through August 2007 is $247,844, and the total 2007 expense will exceed MECO's test year estimate of $329,597. In September 2007, MECO issued a purchase order for $93,369 as part of the cost to repair the verac on bulk tank #2, which will bring the 2007 recorded expenses to at least $341,213.
2) MECO has provided information on specific projects that indicate that the higher test year level of expenses will continue through 2012. In addition, the recorded KPP structural maintenance expense for 2006 of $293,212, was substantially higher than the level of expenses incurred from 2001 through 2005, and indicates that the higher level of KPP structural maintenance expense reflected in MECO's test year estimate began in 2006.
3) The Consumer Advocate's statement that "after completion of the current cycle of concentrated structural work at KPP, the normalized $251,451 amount included in rates established in this proceeding will likely exceed the actual incurred annual costs" is not supported by any evidence of the level of structural maintenance expenses beyond 2012.
4) The rates established in this rate case are not expected to continue beyond 2012, since MECO will likely have another rate case before 2013.

Based on the above, for purposes of settlement, MECO and the Consumer Advocate agreed to reverse the Consumer Advocate adjustment and include MECO's test year estimate of $329,597 for Kahului Power Plant structural maintenance expense.

e. Maalaea Power Plant Nox Water Expense

In its direct testimony, MECO included $293,291 as a normalization adjustment for Nox water costs at the Maalaea Power Plant. This amount was derived by calculating the water treatment expenses as a ratio of fuel burn quantified for the test year and relies on the average incurred Nox water treatment expenses from 2003 through 2005, factored up for an assumed inflation increase and then divided by the actual fuel burned during 2003-2005. The estimated cost factor was then multiplied by the test year projected fuel burn barrels to calculate the adjusted test year expense of $293,291. (See MECO-WP-501d.)

In its written testimony, the Consumer Advocate contended that MECO's adjustment appeared to be based on two flawed assumptions: (a) that Nox water treatment expenses are subject to inflation, and (b) that Nox water treatment expenses always vary directly with the amount of fuel being burned, with no efficiency gains achievable through improved technology. These objections were based on the historical actual Nox water treatment expenses and fuel burn quantities at Maalaea. In addition, the Consumer Advocate noted that MECO made changes to its Nox water facilities that cause the historical water treatment costs as used in the Company's normalization calculations to be unreliable in predicting future cost levels. As a result, the Consumer Advocate proposed an adjustment to reduce MECO test year 2007 Maalaea Power Plant Nox water expense by $44,839, resulting in a test year projection of $248,452. The adjustment effectively reversed the Company's normalization adjustment and results in an expense projection that represents the amount included in MECO's 2007 budget prior to the normalization adjustment proposed by MECO. (See MECO-WP-501d; CA-T-3, pages 33 -34; CA-101, Schedule C-7.)

For purposes of settlement, MECO accepts the Consumer Advocate's proposed adjustment resulting in a test year expense for Maalaea Power Plant Nox water of $248,452.

f. Emission Fee Expense

MECO pays emission fees to the Hawaii Department of Health ("DOH") as a contribution to the State's clean air fund, based on the utility's calculated quantities of air pollution emissions at a dollar per ton rate that is established by the DOH. In its direct testimony, MECO included $404,998 for MECO's consolidated test year emission fee expense, including $363,987 for the Maui Division, $17,733 for the Lanai Division, and $23,278 for the Molokai Division. (See MECO responses to CA-IR-104, page 2 and CA-IR-2, Attachment 30a.) Subsequently, MECO revised its emission fee expense for test year 2007 to $463,562, to reflect a higher emission fee rate of $57.14 per ton. (See MECO response to CA-IR-327, Attachment A.)

In its written testimony, the Consumer Advocate noted that while in most historical years the calculated fees are assessed by and paid to the DOH, in some prior years such fees have been entirely waived. As a result, the Consumer Advocate proposed an adjustment to normalize the test year emission fee expense projection and recognize that in some years, the fees have been waived and not paid to the DOH. The Consumer Advocate's adjustment reduced MECO consolidated 2007 test year expenses for emission fees by $16,182, including reductions of $7,389, $3,800, and $4,993, for the Maui, Lanai, and Molokai Divisions, respectively. The adjustment was made to MECO's updated test year emission fee estimate set forth in the Company's response to CA-IR-327 and effectively reduced such amounts by 3/13ths because MECO has only paid emission fees in 10 of the last 13 years. In support of its adjustment, the Consumer Advocate observed that its proposed adjustment is consistent with the adjustments made by the Company in the most recent HECO and HELCO rate cases. (See CA-T-3, page 36; CA-101, Schedule C-8.)

For purposes of settlement, MECO accepts the Consumer Advocate's proposed adjustment, resulting in a consolidated test year expense for emission fees of $388,818, consisting of $356,598, $13,933 and $18,285 for Maui, Lanai and Molokai Divisions, respectively.

TRANSMISSION AND DISTRIBUTION (T&D) O&M EXPENSES

11. T&D O&M expense includes the labor and non-labor items incurred in the operation and maintenance of MECO's T&D system. These items are captured in the following NARUC series of accounts:

560-567	-	Transmission Operation Expenses

568-573	-	Transmission Maintenance Expenses
580-589	-	Distribution Operation Expenses
590-598	-	*Distribution Maintenance Expenses*

In its direct testimony, MECO stated that its 2007 T&D O&M expense forecast is greater than the trend at which the Company's T&D expenses have generally increased on an annual basis since 2001 due to increased vegetation management efforts, system plant aging, increased inspections, and technological changes and improvements, as well as other factors such as increased labor cost, cost of materials, growth in the T&D utility plant, mapping expenses, and staffing changes.

MECO's total test year T&D O&M expense projections on a consolidated and island by island basis are as follows:

	T&D O&M Expenses MECO Test Year Estimate			
	Transmission	Distribution	Total	Source
Maui Division	$2,243,594	$5,644,523	$7,888,117	MECO-602
Lanai Division	$0	$238,407	$238,407	MECO-602
Molokai Division	$33,144	$453,673	$486,817	MECO-602
Total Company	$2,276,738	$6,336,603	$8,613,341	MECO-602

In its direct testimony, the Consumer Advocate's proposed T&D O&M expense projections on a consolidated and island by island basis were as follows:

	T&D O&M Expenses Consumer Advocate Test Year Estimate			
	Transmission	Distribution	Total	Source
Maui Division	$2,023,286	$5,139,696	$7,162,982	Exhibit CA-102 Schedule C, page 1
Lanai Division	$0	$237,334	$237,334	Exhibit CA-103 Schedule C, page 1
Molokai Division	$31,090	$426,490	$457,580	Exhibit CA-104 Schedule C, page 1
Total Company	$2,054,376	$5,803,520	$7,857,896	CA-101 Schedule C, page 1

The Consumer Advocate's recommendation differed from MECO's due to the following two adjustments proposed by the Consumer Advocate:

- an adjustment to reduce the labor costs associated with new employee positions that have not been filled for the entire 2007 test year (See CA-T-1, pages 67-79 and CA-101, Schedule C-13); and

- an adjustment to normalize the T&D O&M non-labor outside contract services expense estimate.

For purposes of settlement, MECO and the Consumer Advocate have reached agreement on both of the above adjustments, as described in greater detail below. The result is a total test year T&D O&M expense projection on a consolidated and island by island basis as follows:

	T&D O&M Expenses		
	Transmissions	Distribution	Total
Maui Division	$2,063,759	$5,242,718	$7,306,476
Lanai Division	$0	$246,108	$246,108
Molokai Division	$30,955	$424,825	$455,780
Total Company	$2,094,713	$5,913,651	$8,008,364

Note: slight difference due to rounding.

Reference: Statement of Probable Entitlement, page 1 of Exhibits 1, 2, 3, 4.

a. Payroll Expense Adjustment

In its direct testimony, MECO proposed to include $774,690 of transmission labor expense and $3,648,461 of distribution labor expense in the 2007 test year (MECO-603, pages 1-2). This amount included the costs associated with five additional positions (i.e., a vehicle mechanic, an environmental specialist, a senior inspector, a system inspector and a transmission and distribution analyst) in the T&D Department, two additional positions (i.e., a staff engineer and a customer designer) in the Engineering Department (MECO T-6, pages 35-37) and certain positions that were unfilled at the beginning of the test year. The Company's 2007 test year labor expense reflected payroll costs associated with a staff of 111 in the T&D Department and 31 in the Engineering Department for the entire test year compared to 96 employed in the T&D Department and 29 employed in the Engineering Department at the end of December 2006. As of September 2007, the T&D Department and the Engineering Department had headcounts of 108 and 31, respectively (MECO response to CA-IR-112.

For the reasons discussed in paragraph 10.a. above, the Consumer Advocate proposed a consolidated T&D O&M labor expense adjustment of $185,006 to reduce MECO's test year labor expense estimate for the labor costs associated with 8.5 employee positions. The proposed adjustment was based on the simple average of the Company's actual number of T&D employees at the beginning and the forecasted employee count at the end of the test year (i.e., December 31, 2006 and December 31, 2007, respectively). The adjustment reduced MECO's T&D O&M labor expense projection for the Maui, Lanai and Molokai Divisions by $179,355, $3,715, and $1,935, respectively.

During the settlement discussions, the Company represented that an employee was offered and accepted employment in November 2006, but began employment on January 15,2007 for RA "MDE." In addition, since the position was filled in January 2007, MECO represented that the level of employees for RA "MDE" remained at a minimum of 10 employees through September 2007 (see response to CA-IR-112, updated September 2007, Attachment A, page 7). Based on the above, MECO proposed to reduce the Consumer Advocate's T&D labor expense adjustment by $26,881 (see MECO T-11, Attachment 3(AAA) attached hereto) to reflect this employee's compensation in determining the test year labor costs. After reviewing the information, the Consumer Advocate agreed to revise its adjustment to reflect the compensation for 8.0 employees (versus the 8.5 employees upon which the Consumer Advocate based its original adjustment), recognizing that the MDE position was already included in MECO's forecast employee count at test year end.

Further, the Company represented that in the first six months of 2007 it incurred unbudgeted overtime for RAs "MDK" and "MDR" and proposed reducing the Consumer Advocate's T&D labor expense adjustment by an additional $130,972. After reviewing the information the Consumer Advocate contended that its concerns were not entirely alleviated with the additional information provided by MECO. In the interest of compromise, however, the Consumer Advocate analyzed the additional information supplied by MECO and agreed, for purposes of settlement, to revise its adjustment to recognize a partial offset of $45,700 for additional overtime compensation for RAs MDK and MDR (see MECO T-11 Attachments 3(AA) and 3(B), attached hereto).

The revisions discussed above reduced the Consumer Advocate's adjustment decreasing the consolidated T&D O&M labor expense by $112,426, including reductions of $110,233 for the MECO Division, $1,058 for the Lanai Division, and $1,135 for the Molokai Division (see MECO T-11, Attachments 3 and 3(AA), attached hereto). For purposes of settlement, MECO accepts the Consumer Advocate's revised adjustment.

b. Outside Services Adjustment

MECO's 2007 test year estimate for transmission and distribution expenses included $2,071,455 of outside services costs, of which $898,023 was for vegetation management. The remainder was for other outside services for specialized functions such as steel pole maintenance, helicopter work, road maintenance, maintenance of proprietary software and waste oil disposal (response to CA-IR-338).

In direct testimony, the Consumer Advocate proposed a consolidated T&D O&M non-labor expense reduction of $570,440, including $545,780 for the Maui Division (see CA-102, Schedule C-19), $(2,642) for the Lanai Division (see CA-103, Schedule C-19), and $27,302 for the Molokai Division (see CA-104, Schedule C-19) to normalize the outside contract services expense for the 2007 test year. The adjustment was based on the three-year average of costs incurred from 2005 through 2007 since the Consumer Advocate noted that the T&D outside service costs fluctuated from year-to-year. (See CA-T-1, pages 97-99; CA-101, Schedule C, page 4 and Schedule C-19.)

During the settlement discussions, the Company agreed that an adjustment may be warranted to its original consolidated outside service forecast of $2,071,455, but disagreed as to the amount of the adjustment. MECO proposed to reduce the Consumer Advocate's consolidated adjustment by $177,889, resulting in a consolidated outside service projection for the test year of $1,678,904. This amount was: (1) based on a five versus three-year average of outside services expense in order to mitigate the reduced spending that occurred in 2005 and 2006 and (2) reflected the normalization reductions that were made by MECO to the Company's outside services expense projection to offset the higher than budgeted annual production maintenance expenses for 2007 (see MECO T-6, Attachment 4, attached hereto).

After reviewing this information, the Consumer Advocate agreed, in the interest of compromise and to settle this issue, to revise its adjustment by $77,889 (see MECO T-6, Attachment 4, attached hereto) to reflect a five-year average for outside services expense. For purposes of settlement, the Company accepts the Consumer Advocate's revised adjustment. As a result, the Parties agree on a total consolidated T&D O&M non-labor consolidated outside services projection of $1,578,904. The expense related adjustment reducing expense by $492,551, including a $471,408 reduction for the Maui Division, an $8,759 increase for the Lanai Division, and a $29,902 reduction for the Molokai Division (see MECO T-6, Attachment 4).

<u>CUSTOMER ACCOUNTS</u>

12. Customer Accounts expenses are those expenses primarily related to managing and maintaining services and information related to customer account services and customer account management. (See MECO T-7, page 3). The type of activities associated with the Customer Accounts expenses (and that are performed by the Company's Customer Service Department) include: (1) customer billing and mailing, (2) meter reading, (3) collecting and processing payments, (4) handling customer inquiries, (5) maintaining customer records, (6) managing delinquent and uncollectible accounts, and (7) conducting field services and investigations. (See MECO T-7, page 4). In addition, Customer Accounts expenses include the Allowance for Uncollectible Accounts (i.e., Account No. 904) as described further below. (See MECO T-7)

In its direct testimony, MECO's total projected consolidated test year Customer Accounts expenses amounted to $3,300,000. (See MECO T-7, page 2). As such, without including an allowance for uncollectible accounts expenses, the projected consolidated test year Customer Accounts expenses are estimated to be $3,086,000 (i.e., $3,300,000 (MECO-701) less uncollectibles of $214,000 (MECO-711, page 1)). As indicated herein, the Company's projections for Customer Accounts expenses were based on either recorded averages, historical trends, adjusted for special situations or recent changes that will result in material impacts.

In its direct testimony, the Consumer Advocate recommended a test year consolidated customer accounts expense estimate of $3,015,659 (CA-101, Schedule C, page 1), excluding allowance for uncollectible accounts, resulting in a reduction of approximately $70,000 (i.e., $70,341 rounded) to the Company's projected consolidated test year labor cost estimate. (See CA-101, Schedule C, page 3; see also CA-101, Schedule C-13.)

For purposes of settlement, MECO and the Consumer Advocate have reached agreement on the payroll adjustment as discussed in the following paragraph. As a result of the above stipulated adjustment in connection with payroll expense adjustment for Customer Accounts, noted above, the Parties agreed on a consolidated test year estimate of $3,017,000 (i.e., $3,017,329 rounded) for Customer Accounts expenses, excluding the allowance for uncollectible accounts, consisting of $2,709,329 for the Maui Division, $139,000 for the Lanai Division and $169,000 for the Molokai Division.

a. Payroll Expense Adjustment

For the reasons discussed in paragraph 10.a. above, in its direct testimony, the Consumer Advocate proposed a consolidated (and Maui Division) Customer Accounts O&M labor expense adjustment of $70,341 to reduce MECO's test year labor expense estimate for the labor costs associated with 0.5 employee positions plus allocated labor expense for production, transmission and distribution RAs. The proposed adjustment was based on the simple average of the Company's actual beginning of year and forecasted end of year Customer Accounts employee count (i.e., December 31, 2006 and December 31, 2007, respectively). (See CA-T-1; pages 67-79; see also CA-101, Schedule C-13.)

During the settlement discussions, the Company represented that in the first six months of 2007, it incurred unbudgeted overtime for RA "MDR" and, therefore, proposed reducing the Consumer Advocate's Customer Accounts labor expense adjustment of $70,341 by $1,670 (see MECO T-11, Attachment 3(AAA) and the Payroll Expense Adjustment section for T&D above.) After reviewing the information, the Consumer Advocate agreed to revise its consolidated (and Maui Division) proposed adjustment to $68,671 (see MECO T-11, Attachments 3, 3(AA) and 3(C), attached hereto). For purposes of settlement, MECO accepts the Consumer Advocate's revised adjustment.

ALLOWANCE FOR UNCOLLECTIBLE ACCOUNTS

13. In its direct testimony, MECO's test year consolidated allowance for uncollectible accounts was estimated to be $214,000 at present rates (consisting of $200,000, $6,000 and $8,000 for the Maui, Lanai and Molokai Division, respectively), and $225,000 (consisting of $209,000, $7,000 and $9,000 for the Maui, Lanai and Molokai Division, respectively) at proposed rates. (See MECO-711, page 1). The test year estimate of uncollectibles differs between present and proposed rates because the amount is based

upon the Company's electric sales revenues multiplied by an "uncollectible factor" (aka, Percentage of Electric Sales Revenues methodology). (See MECO T-7, page 28). As such, the proposed rates for the total Company and by Division (Maui, Lanai and Molokai) were based on the application of an "uncollectible factor" of 0.06% to test year revenues at present and proposed rates. (See MECO-WP-711, page 1).

The Consumer Advocate, in its direct testimony (CA-T-3, page 44), accepted the $214,000 test year consolidated allowance for uncollectible accounts expense amount, at present rates, as reasonable, as it believed such amount is consistent with recently incurred amounts of uncollectibles actually written off by MECO. (See CA-T-3, page 44). However, the Consumer Advocate disagreed with MECO utilizing the "Percentage of Electric Sales Revenue" methodology for calculating the allowance for uncollectible accounts expense amount, at proposed rates. The Consumer Advocate, thus, recommended that the rate increase granted in this proceeding not be factored up by $11,000 (as initially proposed by MECO) for presumed increases in uncollectible expenses, at proposed rates, because the Consumer Advocate contended that there is an "absence of a linear relationship between revenues and uncollectibles." Thus, the Consumer Advocate included a zero value in its Revenue Conversion Factor schedule set forth in CA-101, Schedule A-1, line 7. (See CA-T-3, pages 44-46).

In response to the Consumer Advocate's direct testimony and during settlement discussions, the Company disagreed with the Consumer Advocate's recommendation that the rate increase granted in this proceeding not be factored up by 0.06% for increases in uncollectible expenses for the following reasons. First, MECO believed that there is and will continue to be a linear relationship between revenues and uncollectible expenses because as electric sales revenues increase for MECO due to the proposed rate increase, the corresponding amount of uncollectible dollars can be expected to increase proportionately. (See MECO T-7, page 28). Second, allowing the rate increase granted to be factored up by 0.06% for increases in uncollectible expenses is consistent with such adjustment allowed at proposed rates in HELCO's most recent rate case (i.e., Interim Decision and Order No. 23342, dated April 4, 2007 Docket No. 05-0315).[4] Third, its "uncollectible factor" factor of 0.06% is reasonable, as it was based on the latest recorded year actual write-offs at the time of the Application and direct testimonies were filed (i.e., calendar year-end 2005 recorded net write-off of 0.0546% rounded, which was used in direct testimony; the calendar year-end 2006 recorded net write off was 0.06%),[5] which is also akin to the methodology used by HELCO in Docket No. 05-0135, but different from the historical 10-year average methodology used in HECO's most recent rate case (Docket No. 2006-0386). The 0.06% factor is near the lowest amount in comparison to the past five years which ranged from a high in December 2001 of 0.1172% to a low of 0.0546% in December 2005. (See MECO T-7, page 29.) Further, in

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4 Such a factor up was not allowed in the Stipulation resolving HECO Docket No. 2006-0386 and will be reviewed by the Consumer Advocate on a case-by-case basis in future proceedings.

5 The calendar year-end 2006 recorded net write-off percentage was provided in the response CA-IR-138, Attachment A.

response to CA-IR-353, part b, the Company stated that it anticipates that uncollectible write-offs may be higher than the test year estimate, if write-offs continue at the rate recorded through July 2007.[6] Finally, the "Percentage of Sales Revenue" methodology for both present and proposed rates has been accepted by the Commission in several previous rate case proceedings. See Interim Decision and Order No. 22050 in Docket No. 04-0113, dated September 27, 2005, for HECO's 2005 test year; Decision and Order No. 14412, dated December 11, 1995, in Docket No. 7766 for HECO's 1995 test year; and Decision and Order No. 16922, dated April 6, 1999, in Docket No. 97-0346, for MECO's 1999 test year.

During the settlement discussions and in recognition of the fact that the consolidated write-off factor has been relatively low and stable since 2004, the Consumer Advocate accepted the Company's proposal to use the 0.06% write-off factor at proposed rates in this Docket. Thus, for purposes of settlement, the Parties agreed on the 0.06% uncollectible factor proposed by MECO multiplied against electric sales revenue at proposed rates to determine the allowance for uncollectible accounts at proposed rates. Based on the foregoing, the Parties agreed with the consolidated test year allowance for uncollectible accounts expense estimate of $214,000 and $222,000 at present and proposed rates, respectively, based on the application of the 0.06% uncollectible factor to electric sales revenues. The $222,000 of uncollectibles consists of $206,000 for the Maui Division, $7,000 for the Lanai Division and $9,000 for the Molokai Division.

CUSTOMER SERVICE

14. Customer Service expense represent costs incurred by the Company to perform activities that are primarily related to responding to customer requests and inquiries, and providing educational information on, among other things, energy conservation, renewable energy, and electrical safety. Included in customer service expense are (1) labor and non-labor costs for the Company's Administration Department and the Administration, Commercial Services and IRP Divisions of the Customer Service Department to provide information and assistance toward encouraging safe, efficient, and economical use of the company's electric services and (2) labor and non-labor costs for IRP that were previously incremental costs recovered through the IRP Cost Recovery Provision and are now proposed by MECO to be recovered through base rates.

The test year customer service expense proposed by MECO in its direct testimony and June 2007 Update and the test year estimate proposed by the Consumer Advocate in its direct testimony are as follows:

Customer Service	MECO Direct [A]	MECO Update [B]	Consumer Advocate Direct [C]
Maui Division	$1,538,000	$1,740,000	$1,161,035

6 YTD July 2007 cumulative write-offs = $139,756 times 12/7 = $239,582.

Lanai Division	$1,000	$1,000	$1,000
Molokai Division	$2,000	$2,000	$2,000
Total Company	$1,541,000	$1,743,000	$1,164,035

References:
A – MECO-801
B – June 2007 Update, MECO T-8, filed 7/12/07; Update Attachment A, pages 1-3.
C – CA-102, Schedule C, page 1; CA-103, Schedule C, page 1; CA-104, Schedule C, page 1; CA-101, Schedule C, page 1 for the Maui, Lanai, Molokai and Consolidated operations, *respectively*.

The difference between the Company's and the Consumer Advocate's projections are due to the following four adjustments proposed by the Consumer Advocate:

- an adjustment to reclassify MECO's projected DSM labor and related on costs labor overheads from base rates and instead continue to recover such costs in the IRP surcharge (see CA-102, Schedule C-9; see also CA-102, Schedule C, page 2);
- an adjustment to reduce MECO's projected IRP non-labor expenses (see CA-102, Schedule C-10; see also CA-102, Schedule C, page 3);
- an adjustment to reduce the allocation from HECO RA "PNG" for marketing support expenses that are projected to be incurred on behalf of MECO (see CA-102, Schedule C-11; see also CA-102, Schedule C, page 3); and
- an adjustment to reduce MECO's projected customer service labor costs (see CA-101, Schedule C-13; see also CA-102, Schedule C, page 3).

As a result of the settlement discussions, the Parties have reached agreement on all four adjustments, as described in greater detail below. The result is a test year 2007 customer service expense projection as follows.

Customer Service Expense	Agreement of Parties
Maui Division	$1,312,586
Lanai Division	$1,000
Molokai Division	$2,000
Total Company	$1,315,586

a. <u>DSM Employee Reclassification Adjustment</u>

In the June 2007 Update for MECO T-8, MECO increased customer service labor cost for the Maui Division by $202,000 to reflect the labor costs of three MECO employees (i.e., an Energy Efficiency Program Manager-Commercial & Industrial, an Energy Efficiency Program Manager-Residential and a Clerk Typist III-DSM). (See June 2007 Update, MECO T-8, and Update Attachment A, pages 1-3.) The inclusion of the labor costs for these three employees in the test year revenue requirement also required adjustments for certain on-costs (i.e., the administrative expenses and employee benefit expenses transferred to capital and other accounts reflected in NARUC account nos. 922 (MECO expense element 406) and 926 (MECO expense element 422), respectively, and the projected test year payroll taxes). (See June 2007 Update, MECO T-8.) MECO's proposal to include the labor and labor related costs for these employees in base rates resulted from Commission Decision and Order No. 23258 ("D&O 23258"), wherein the Commission stated that "labor costs shall be recovered through base rates and all other DSM-related utility-incurred costs shall be recovered through a surcharge." (See Docket No. 05-0069, Decision and Order No. 23258, page 51.)

In its direct testimony, the Consumer Advocate proposed a $319,000 reduction for the Maui Division (see CA-102, Schedule C, page 2 and CA-102, Schedule C-9) to remove the test year proposed level of DSM program labor and labor related on costs of the three positions from base rates and instead have these costs recovered through the IRP surcharge. CA-102, Schedule C-9 reflects that the $319,000 was comprised of $201,850 for direct labor to the Customer Service Expense, $101,967 for employee benefits and overheads and $15,183 for payroll taxes. In support of its recommendation, the Consumer Advocate contended that without the proposed reclassification of the DSM labor and related expenses to be recovered in the IRP surcharge, there is no ability to remove the DSM program costs that are embedded in base rates absent a utility rate case, once responsibility for DSM program administration is transferred from the utility to a third party administrator. (See CA-T-3, pages 53-55.)

The Company accepts the Consumer Advocate's recommendation for purposes of settlement and agrees to remove the labor and related on-costs associated with these three employees from the test year revenue requirement and instead recover these costs through the IRP surcharge. In addition, if the Company continues to incur labor costs for the management of the energy efficiency programs after the transition to a non-utility market structure (expected to occur in or about January 2009) MECO should be able to continue recovering such costs through the DSM component of the IRP cost recovery provision ("DSM Surcharge"). This recovery is to compensate MECO for the actual expenses incurred as a result of such market structure. For example, MECO may be required to collect the public benefits charge through the existing IRP Surcharge, and thus may be required to incur costs to administer the public benefits fund or to ensure a smooth transition to a non-utility structure, as required by Order No. 23681, Docket No. 2007-0323.

Based on the above, MECO and the Consumer Advocate agree to reduce the costs of the Customer Service labor expenses for the Maui Division by $202,000 and making appropriate adjustments to the associated overhead costs to the appropriate accounts for the Maui Division: $23,500 to administrative expenses transferred, $78,500 to employee benefits transferred; and $15,000 to payroll taxes. (See June 2007 Update, MECO T-8, and Update Attachment A.) These overhead cost adjustments are discussed in paragraph 15c, paragraph 15f and paragraph 19, respectively, of this document.

b. IRP Non-Labor Expense Adjustment

In direct testimony, MECO included $696,000 in its Maui Division test year estimate for non-labor integrated resource planning costs (see MECO-812 and MECO-WP-812). This amount reflected a three-year average of actual 2005, part actual and part forecast 2006 (i.e., January to July actual and August to December forecast) and forecast 2007 (MECO-812) expenses, consistent with the methodology used to derive the normalized IRP general planning costs to be recovered in base rates.[7]

In its direct testimony, the Consumer Advocate accepted the three-year averaging approach that had been accepted by the Commission (see response to CA-IR-411.e), but proposed to calculate the three-year average based on the actual 2005, 2006 and assumed ratable continued spending in 2007, based on actual year-to-date August 2007 spending by MECO (see CA-T-3, page 58). The three-year average expense proposed by the Consumer Advocate is $497,627 (see CA-102, Schedule C-10), which results in a proposed reduction of $198,217 to MECO's projected non-labor IRP planning costs for the 2007 test year revenue requirement (CA-102, Schedule C-10; see also CA-102, Schedule C, page 3).

During the settlement discussion, MECO agreed to the methodology used by the Consumer Advocate, but recommended that the computation take into consideration the updated forecast for the remaining months in 2007, as reflected in MECO's response to CA-IR-362, Attachment A (updated 9/27/07). This updated forecast was derived by MECO after reviewing each line item and estimating the cost for known activities that are expected to be incurred for the rest of the year including studies related to IRP planning best practices, and long-term peak forecasting. MECO thus proposed that the test year IRP general planning costs be $532,029, which is $164,000 ($163,815 rounded up) lower than the Company's original test year estimate of $696,000 for the Maui Division. (See MECO T-8, Attachment 1, attached hereto.)

For purposes of settlement, the Consumer Advocate agreed to MECO's settlement proposal. As a result, the Parties agree to reflect $532,029 of IRP general planning costs in the test year revenue requirement.

c. HECO PNG Marketing Support Adjustment

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7 See Docket No. 99-0207, HELCO 2000 Test Year Rate Case, Decision and Order No. 18365, filed on February 8, 2001, pages 19 - 21, for the source documents, calculations and references related to the determination of the IRP costs to be included in base rates. See Docket No. 04-0113, HECO 2005 Test Year Rate Case – Stipulated Settlement Letter, filed on September 16, 2005, Exhibit II, page 6, and HECO-1029, for the source documents and calculations used to determine the IRP costs to be included in base rates in Interim Decision and Order No. 22050. See Docket No. 05-0315 Interim Decision and Order No. 23342, HELCO 2006 Test Year Rate Case, filed on April 4, 2007, Exhibit A, page 1, Customer Service Expense, and HELCO T-8, page 16 and 17, and HELCO RT-8, page 6, for the source documents and calculations used to determine the IRP costs to be included in base rates in the latest HELCO rate case, Docket No. 05-0315.

In direct testimony, MECO included $47,531 in its 2007 test year Maui Division estimate to reflect the intercompany charges from HECO (RA PNG) for marketing support provided on MECO's behalf. (See response to CA-IR-2 for MECO T-8, Attachment B, page 11.)

In its written testimony, the Consumer Advocate expressed a concern with the reasonableness of MECO's projection, noting that the amount is significantly higher than the actual charges that were incurred in each of the past three years (see CA-T-3, page 59). As a result, the Consumer Advocate proposed an adjustment of $28,476, to reflect $19,055 in the test year customer service projection. The Consumer Advocate's recommendation was based on the three-year average of the actual allocation for the years 2004, 2005 and 2006. (See CA-102, Schedule C-11; CA-102, Schedule C, page 3.)

For purposes of settlement, the Company agrees to reduce the test year estimate of intercompany charges from HECO's PNG RA for marketing support by $28,000 (i.e., $28,476 rounded).

d. Payroll Expense Adjustment

For the reasons discussed in Section 10.a. above, the Consumer Advocate proposed a MECO consolidated (and Maui Division) Customer Service labor expense adjustment of $33,272, based on the simple average of the Company's actual beginning and forecasted end of year Customer Service employee count (i.e., December 31, 2006 and December 31, 2007, respectively). For purposes of settlement, MECO agrees to accept the Consumer Advocate's adjustment. (See MECO T-11, Attachments 3 and 3(D), attached hereto.)

ADMINISTRATIVE AND GENERAL (A&G)

15. A&G expenses represent a diverse group of expenses including operating expenses not provided for in other functional areas and expenses which represent the total Company costs for certain specific items (e.g., property insurance costs included in account no. 924). The types of expenses provided for in A&G expenses include (1) administrative and general labor; (2) office supplies and expenses; (3) outside services for legal, others and provided by associated companies; (4) property insurance; (5) injuries and damages; (6) employee benefits; (7) regulatory commission expenses; (8) institutional/goodwill advertising; (9) miscellaneous general expenses including community service activities, company memberships, research and development, preferred stock and long-term debt expenses, and directors' fees and expenses; (10) rent expense; and (11) maintenance expense.

Test year A&G O&M expense for consolidated MECO was estimated to be $13,559,700 in direct testimony (see MECO-901, page 20), which was comprised of $12,549,600 for the Maui Division, $343,700 for the Lanai Division, and $666,400 for the Molokai Division (see MECO-901, pages 5, 10 and 15, respectively). The direct testimony estimate was increased by $322,200 to an updated total of $13,881,900 in the Company's

June 2007 Update for MECO T-9, which was comprised of $12,855,100 for the Maui Division, $350,300 for the Lanai Division and $676,500 for the Molokai Division (see Attachment 1 of the Update, pages 20, 5, 10 and 15, respectively), filed on July 10, 2007.

In its written testimony, the Consumer Advocate recommended a test year expense estimate of $13,400,601 (CA-101, Schedule C, page 1) for consolidated MECO, resulting in a reduction of $481,299 to the Company's June 2007 Update estimate (a reduction of $159,099 from the Company's direct testimony estimate).

The test year A&G O&M expense proposed by MECO in its direct testimony and June 2007 Update and the test year estimate proposed by the Consumer Advocate in its direct testimony are as follows:

A&G O&M	MECO Direct [A]	MECO Update [B]	Consumer Advocate Direct [C]
Maui Division	$12,549,600	$12,855,100	$12,397,704
Lanai Division	$343,700	$350,300	$341,026
Molokai Division	$666,400	$676,500	$661,871
Total Company	$13,559,700	$13,881,900	$13,400,601

References:
A – MECO-901, pages 5, 10, 15, and 20, for Maui, Lanai, Molokai and MECO consolidated, respectively.
B – June 2007 Update, MECO T-9, filed 7/10/07; Update Attachment 1, pages 5, 10, 15, and 20, for Maui, Lanai, Molokai and MECO consolidated, respectively.
C – CA-102, Schedule C, page 1; CA-103, Schedule C, page 1; CA-104, Schedule C, page 1; CA-101, Schedule C, page 1 for the Maui, Lanai, Molokai and Consolidated operations, respectively.

The difference between the Parties resulted from the following six adjustments proposed by the Consumer Advocate:

- an adjustment to remove the labor costs associated with new employee positions that have not been filled for the entire 2007 test year (see CA-T-1, pages 67-79 and (CA-101, Schedule C, page 3 and CA-101, Schedule C-13);
- an adjustment to reduce MECO's projected employee benefits expense to correspond with the Consumer Advocate's recommended labor cost adjustments as discussed above (see CA-101, Schedule C, page 3 and CA-101, Schedule C-14);
- an adjustment to remove the Company's pension asset amortization (see CA-101, Schedule C, page 3 and CA-101, Schedule C-16);
- an adjustment to normalize the non-EPRI research and development expense that is included in MECO's test year expense projection (seeCA-101, Schedule C, page 3 and CA-101, Schedule C-17);

- an adjustment to remove a software amortization that is expiring in September 2007 (see CA-101, Schedule C, page 4 and CA-101, Schedule C-18); and
- an adjustment to normalize the Ho'omaika'i award costs (see CA-101, Schedule C, page 4 and CA-101, Schedule C-20).

For purposes of settlement, MECO and the Consumer Advocate have reached agreement on all six adjustments, as described in greater detail below. The result is a test year estimate of $13,306,347 for MECO consolidated, which is comprised of $12,303,194 for the Maui Division, $341,176 for the Lanai Division and $661,977for the Molokai Division. The agreed upon test year estimate is $575,553 less than MECO's June 2007 Update estimate and also reflects the removal of corporate administration and employee benefits expenses (see subparagraphs 15c and 15f, respectively) associated with the reclassification of the DSM Program expenses for the three Customer Service employees whose labor costs are to be recovered through the IRP surcharge, as opposed to base rates, as discussed in paragraph 14.a. above. The test year estimate for A&G O&M expense based on the agreement of the parties is summarized as follows:

A&G O&M Expense	Agreement of Parties
Maui Division	$12,303,194
Lanai Division	$341,176
Molokai Division	$661,977
Total Company	$13,306,347

a. <u>Employee Count Adjustment (CA-101, Schedule C-13)</u>

In CA-T-1 (Exhibit CA-101, Schedule C-13), the Consumer Advocate initially proposed a consolidated A&G O&M labor expense adjustment of $5,041 based on the same methodology and rationale for the proposed payroll adjustments to the other functional expenses (Exhibit CA-101, Schedule C-13) – i.e., the simple average of the Company's actual A&G employee count at the beginning of the year and the end of year estimate (i.e., December 31, 2006 and December 31, 2007, respectively). During the settlement discussions, the Company represented that in the first six months of 2007, it incurred unbudgeted overtime for RAs "MDK" and "MDR" and proposed reducing the Consumer Advocate's MECO consolidated (and Maui Division) A&G labor expense adjustment by $3,113. (See the Payroll Expense Adjustment section for T&D above.) After reviewing the information the Consumer Advocate agreed to revise its MECO consolidated (and Maui Division) adjustment to $1,928 (see MECO T-11, Attachments 3 and 3(E), attached hereto). For purposes of settlement, MECO accepts the Consumer Advocate's revised adjustment.

b. <u>Ho'omaika'i Award Costs (CA-101, Schedule C-20)</u>

MECO included $93,650 for total MECO in its direct testimony test year estimate for Administrative and General direct non-labor, account no. 920, for Ho'omaika'i Award costs (MECO T-9 response to CA-IR-2, Attachment C). In the June 2007 Update, the Company reduced its test year estimate for Ho'omaika'i Award costs by $36,900 to remove the costs associated with the terminated Ho'okina Program (see June 2007 Update, MECO T-9, page 1). As a result of the adjustment made in the June 2007 Update, the Company's test year estimate for Ho'omaika'i Award costs was reduced from $93,650 to a consolidated $56,750 ($93,650 - $36,900 = $56,750), which was comprised of $52,636 for the Maui Division, $1,390 for the Lanai Division and $2,724 for the Molokai Division.

The Consumer Advocate noted in CA-T-1, page 103, beginning on line 1, that MECO did not meet all safety goals in 2004 and 2006. Consequently, the Consumer Advocate proposed a further adjustment of $24,489 based on a normalized four-year average of award costs recorded for 2004 - 2006 and forecast for 2007 (see CA-T-1, page 103, beginning on line 12, and Exhibit CA-101, Schedule C-20).

For purposes of settlement, the Company accepts the Consumer Advocate's proposed $24,489 consolidated reduction to test year Ho'omaika'i award costs, which is comprised of $22,714 for the Maui Division, $600 for the Lanai Division and $1,175 for the Molokai Division. The adjustment results in a normalized test year estimate of $32,261 for consolidated Ho'omaika'i award costs, which is comprised of $29,922 for the Maui Division, $790 for the Lanai Division and $1,549 for the Molokai Division.

c. <u>DSM Employee Reclassification – Corporate Administration Overheads (CA-101, Schedule C-9)</u>

As discussed in paragraph 14.a. above (i.e., Customer Service expense), the Consumer Advocate proposed an adjustment in CA-T-3 (pages 53-55) to reverse the recovery of the labor costs for three employees from base rates to the IRP surcharge. Consistent with the Parties' agreement regarding the "DSM Employee Reclassification Adjustment" in the Customer Services section above, the Parties agree to the aforementioned adjustment to reduce the test year estimate for account no. 922 (administrative expenses transferred) by a consolidated $23,521 comprised of $23,521 for Maui, $0 for Lanai, and $0 for Molokai, for the purpose of reaching a global settlement in this proceeding.

d. <u>Expiring Software Amortization (CA-101, Schedule C-18)</u>

MECO included $61,066 for total MECO in its direct testimony test year estimate for account no. 923.03, outside services – associated companies, for Ellipse maintenance expense (MECO T-9 response to CA-IR-2, Attachment B), which was comprised of $56,639 for the Maui Division, $1,496 for the Lanai Division, and $2,931 for the Molokai Division. The Company's $61,066 test year estimate for Ellipse maintenance expense included $23,202 for the amortization of software licensing fees which the Company confirmed, in its response to CA-IR-371, part a., was to expire in September 2007. Based on this representation, the Consumer Advocate maintained that "[i]t is necessary and appropriate to remove this amortization expense that will not continue beyond September 30, 2007" (see CA-T-1, page 91, lines 4 and 5 and Exhibit CA-101, Schedule C-18). As a result, in its direct testimony, the Consumer Advocate recommended an adjustment to remove the expiring amortization of software expenses amounting to $23,202 on a consolidated company basis, included by MECO in account no. 923.03.

For purposes of settlement, the Company accepts the Consumer Advocate's proposal to remove $23,202 for the expiring amortization of software licensing fees from the test year expenses, resulting in a normalized consolidated test year estimate of $37,864 ($61,066-$23,202=$37,864) for Ellipse maintenance expense, which is comprised of $35,119 for the Maui Division, $928 for the Lanai Division and $1,817 for the Molokai Division.

e. <u>Employee Count Adjustment (CA-101, Schedule C-14)</u>
In Exhibit CA-101, Schedule C-14, the Consumer Advocate calculated the reduction of MECO's revised forecast of employee benefit expenses to reflect the labor cost adjustment associated with the employee count reduction proposals based on the average test year concept as discussed in paragraphs 10.a., 11.a., 12.a., and 14.d., above (11.5 employees as shown on CA-101 Schedule C-14, as reflected in CA-WP-101-C14, p. 1). Based on the estimated net headcount reduction, the Consumer Advocate's proposed consolidated reduction for the associated employee benefits expense was $56,392 (Exhibit CA-101, Schedule C, page 3, and Schedule C-14).

Based on the settlement reached with regard to the average number of employees for the 2007 test year revenue requirement calculation, the Parties agree to reduce the net headcount reduction by one employee (0.5 for MGD and 0.5 for MDE) to 10.5 employees. As a result, the Parties also agree to a reduction of $4,699 to the Consumer Advocate's consolidated adjustment to employee benefits, resulting in a consolidated $51,693 reduction in employee benefits expense consisting of $48,103 for the Maui Division, $1,356 for the Lanai Division, and $2,234 for the Molokai Division (see MECO T-11, Attachment 3(F), attached hereto).

f. <u>DSM Employee Reclassification – Employee Benefits (CA-101, Schedule C-9)</u>
MECO's estimate for employee benefits expenses is reduced by $78,446 net of amounts transferred (June 2007 Update, MECO T-9, Attachment 1, pp. 24, 41), comprised of $78,446 for the Maui Division, $0 for the Lanai Division and $0 for the Molokai Division, to reflect the reclassification of DSM Program expenses for the three Customer Service employees removed from base rates (to be recovered through the IRP Clause) as discussed in paragraph 14 and subparagraph 14.a. The Parties agree to this reduction.

g. <u>Pension Asset Amortization (CA-101, Schedule C-16)</u>
In the June 2007 Update for MECO T-9, the Company proposed to update its pension estimates to reflect a pension tracking mechanism, similar to the pension tracking mechanism that was agreed to by HELCO and the Consumer Advocate in the HELCO

2006 test year rate case (Docket No. 05-0315) and approved by the Commission on an interim basis in Interim Decision and Order No. 23342, filed on April 4, 2007. To include the estimated amortization of the pension asset balance as of December 31, 2007 (see June 2007 Update MECO T-9, page 3 and Update Attachment 5, page 1), as specified in its proposed pension tracking mechanism, MECO increased its consolidated test year 2007 estimate for account no. 926000 by $241,800, comprised of $225,200 for the Maui Division, $6,600 for the Lanai Division and $10,000 for the Molokai Division.

The Consumer Advocate recommended against including MECO's estimated pension asset in rate base and, therefore, the amortization of such asset in the test year expense (see CA-T-1, pages 21, 22 and 59-61).

Based on the settlement reached with regard to the ratemaking treatment of the pension asset, amortization of the pension asset and implementation of the pension tracking mechanism, the Parties agree to exclude the amortization of the test year ending pension amount and to modify the proposed pension tracking mechanism as discussed in paragraph 23.

h. <u>Non-EPRI Research and Development Expense (CA-101, Schedule C-17)</u>
In its direct testimony, MECO included a consolidated $255,379 test year estimate for account no. 930.2 (miscellaneous general expenses), for non-EPRI research and development costs (MECO-918), which was comprised of $255,379 for the Maui Division, $0 for the Lanai Division and $0 for the Molokai Division. The Company's test year estimate was based on specific projects and programs identified in MECO-918. In its direct testimony, the Consumer Advocate recommended an adjustment to normalize the consolidated $255,379 test year estimate MECO proposed for non-EPRI research and development costs (MECO-918). The Consumer Advocate's recommendation was based on a three-year average, including recorded costs for 2005 and 2006 and MECO's updated 2007 test year estimate (CA-T-1, pages 81 and 82, and Exhibit CA-101, Schedule C-17). The resulting test year expense proposed by the Consumer Advocate was $125,005, based on an adjustment in the amount of $130,374 (see Exhibit CA-101, Schedule C-17).

For purposes of settlement, MECO accepts the Consumer Advocate's proposal to reduce the test year estimate for non-EPRI research and development expense in account no. 930.2 by $130,374 to a consolidated test year estimate of $125,005, which is comprised of $125,005 for the Maui Division, $0 for the Lanai Division and $0 for the Molokai Division. In addition, MECO accepts the Consumer Advocate's proposal to require MECO to provide a full and complete accounting of its research and development costs in its next rate case filing (CA-T-1, page 88, beginning at line 15, and page 89).

DEPRECIATION AND AMORTIZATION

16. Depreciation expense represents the expiration or consumption, in whole or in part, of the service life, capacity, or utility of property used in the provision of the regulated service. The test year depreciation and amortization expense estimates were calculated by first determining the estimated test year depreciation accrual and then adjusting for vehicle depreciation, Contribution in Aid of Construction amortization, Federal investment tax credit amortization, and the amortization of net regulatory assets and liabilities related to Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes.

The Company's test year consolidated estimate of depreciation expense submitted in direct testimony, which was based on estimated depreciable utility plant balances as of January 1, 2007, was $28,872,000, including $26,597,000 for the Maui Division, $1,244,000 for the Lanai Division, and $1,031,000 for the Molokai Division (see MECO-1201). The Company's test year estimate of the test year consolidated average accumulated depreciation submitted in direct testimony was $354,353,000, including $323,681,000 for the Maui Division, $14,315,000 for the Lanai Division, and $16,357,000 for the Molokai Division (see MECO-1202, pages 1 and 2).

With the update of the beginning of test year rate base with actual plant additions in 2006, test year consolidated depreciation expense was reduced by $859,000 to $28,011,000, including $25,619,000 for the Maui Division, $1,264,000 for the Lanai Division, and $1,128,000 for the Molokai Division (see June 2007 Update, MECO T-12, page 4, filed on July 3, 2007). The updated estimate of the test year consolidated average accumulated depreciation increased by $106,000 from $354,353,000 to $354,459,000, including $323,775,000 for the Maui Division, $14,295,000 for the Lanai Division, and $16,389,000 for the Molokai Division (see June 2007 Update, MECO T-12, pages 5 and 6, MECO-1202) due to the inclusion of 2006 recorded data, lower estimated 2007 depreciation accrual, and higher estimated 2007 property retirements and salvage values (see June 2007 Update, MECO T-12).

In its direct testimony, the Consumer Advocate did not recommend any adjustments to the Company's test year estimates for depreciation and amortization expense and the average accumulated depreciation balances reflected in the 2007 test year rate base.

As a result, the Parties agree to a test year estimate for depreciation and amortization expense of $28,011,000 for consolidated MECO, which is comprised of $25,619,000 for the Maui Division, $1,264,000 for the Lanai Division, and $1,128,000 for the Molokai Division. In addition, the Parties agree to a test year estimate for average accumulated depreciation for consolidated MECO of $354,459,000, which is comprised of $323,775,000 for the Maui Division, $14,295,000 for the Lanai Division, and $16,389,000 for the Molokai Division.

TAXES OTHER THAN INCOME TAXES ("TOTIT")

17. TOTIT are taxes related either to utility revenue or to payroll. The taxes related to utility revenue include the State Public Service Company ("PSC") tax, the State Public Utility fee and the County Franchise Royalty tax. The taxes related to payroll include the Federal Insurance Contribution Act and Medicare ("FICA/Medicare") taxes, the Federal Unemployment ("FUTA") tax and the State Unemployment ("SUTA") tax.

In MECO's direct testimony (MECO T-13), the Company proposed a consolidated 2007 test year estimate for TOTIT of $33,068,000 at present rates and $34,748,000 at proposed rates, as follows:

	Taxes Other Than Income Taxes Direct Testimony		
	At Present Rates	At Proposed Rates	Source
Maui Division	$30,918,000	$32,490,000	MECO-1301
Lanai Division	$952,000	$1,000,000	MECO-1301
Molokai Division	$1,198,000	$1,258,000	MECO-1301
Total Company	$33,068,000	$34,748,000	MECO-1301

In its June 2007 Update for MECO T-13, filed on August 24, 2007, the Company updated its test year estimate for payroll taxes for the Maui Division, resulting in a reduction of $16,000 to the consolidated TOTIT projection as follows:

	Taxes Other Than Income Taxes June 2007 T-13 Update		
	At Present Rates	At Proposed Rates	Source
Maui Division	$30,902,000	$32,474,000	June Update, page 1
Lanai Division	$952,000	$1,000,000	June Update, page 1
Molokai Division	$1,198,000	$1,258,000	June Update, page 1
Total Company	$33,052,000	$34,732,000	June Update, page 1

In its direct testimony, the Consumer Advocate recommended a consolidated test year estimate for Taxes Other Than Income Taxes of $33,002,000 (CA-101, Schedule C, page 1), resulting in a proposed decrease of $50,000 to the Company's June 2007 Update estimate (a reduction of $66,000 from the Company's direct testimony estimate). The two adjustments proposed by the Consumer Advocate were as follows:

- an adjustment to reduce the estimated revenue taxes related to ECAC revenue adjustment (CA-101, Schedule C, page 2 and CA-101, Schedule C-3); and
- an adjustment to reduce the estimated payroll taxes related to average staffing adjustments proposed by the Consumer Advocate and discussed in paragraphs 10.a., 11.a., 12.a., and 14.d. above. (CA-101, Schedule C, page 3 and CA-101, Schedule C-15)

Based on the Parties' settlement of the ECAC revenues, as discussed in paragraph 8 above, and the settlement reached on the test year labor costs, as discussed in paragraphs 10.a., 11.a., 12.a., and 14.d. above, the Parties agree to a revised Taxes Other Than Income Taxes consolidated test year estimate of $33,008,000 and $34,178,000 at present and proposed rates, respectively, as noted below:

	Taxes Other Than Income Taxes Settlement Test Year Estimates	
	At Present Rates	At Proposed Rates
Maui Division	$30,863.000	$31,763,000
Lanai Division	$949.000	$1,116,000
Molokai Division	$1,196.000	$1,299,000
Total Company	$33,008.000	$34,178,000

Reference: Statement of Probable Entitlement, page 1 of Exhibits 1, 2, 3 and 4.

18. <u>Revenue Taxes</u>
In its direct testimony, MECO included $31,690,000 of consolidated revenue taxes in the 2007 test year at present rates, and $33,370,000 at proposed rates, as follows:

	Revenue Taxes Direct Testimony		
	At Present Rates	At Proposed Rates	Source
Maui Division	$29,665,000	$31,237,000	MECO-1301
Lanai Division	$896,000	$944,000	MECO-1301
Molokai Division	$1,129,000	$1,189,000	MECO-1301
Total Company	$31,690,000	$33,370,000	MECO-1301

There was no update to the Company's test year revenue tax estimate included in the MECO T-13 June 2007 Update.

In its direct testimony, the Consumer Advocate recommended a reduction to MECO's consolidated test year estimate for revenue taxes of $13,998 (CA-101, Schedule C, page 2 and CA-101, Schedule C-3) to correspond with the proposed adjustment to fuel and purchased energy expenses, which affects the test year ECAC revenues (see CA-T-3, pages 10 and 11).

As explained in paragraph 8 above, the Parties agreed on the test year ECAC revenues, which results in the following test year revenue tax projections:

	Revenue Taxes

	Settlement Test Year Estimates	
	At Present Rates	At Proposed Rates
Maui Division	$29,664,000	$30,564,000
Lanai Division	$896,000	$1,063,000
Molokai Division	$1,129,000	$1,232,000
Total Company	$31,689,000	$32,859,000

Reference: Statement of Probable Entitlement, page 6 of Exhibits 1, 2, 3 and 4.

19. Payroll Taxes

In its direct testimony, MECO *included* $1,378,000 *of consolidated payroll taxes* chargeable to O&M expenses in the 2007 test year, which was comprised of $1,253,000 for the Maui Division, $56,000 for the Lanai Division and $69,000 for the Molokai Division (MECO-1301). The payroll taxes are based on the tax rates set forth by the Federal and State government applied to the compensation base that is subject to such tax. In its June 2007 Update, the Company updated its test year consolidated payroll tax estimate to $1,362,000, which was comprised of $1,237,000 for the Maui Division, $56,000 for the Lanai Division and $69,000 for the Molokai Division (June 2007 Update, MECO T-13, page 1, and Attachment 1, page 1). The updated estimate reflected (a) an update of labor costs, which affected payroll tax expense; (b) an updated SUTA tax rate and (C) an updated SUTA maximum wage base and resulted in a $16,000 net decrease to consolidated test year expenses ($1,378,000-$1,362,000=$16,000), all to the Maui Division.

In its direct testimony, the Consumer Advocate recommended reducing payroll taxes by $35,710, to be consistent with the Consumer Advocate's recommended payroll expense adjustments discussed above (CA-101, Schedule C-15). In addition, the Consumer Advocate recommended a payroll tax reduction of $15,183 due to the reclassification of DSM program labor costs from base rates to the IRP surcharge cost recovery mechanism (Exhibit CA-102, Schedule C-9).

As discussed above, the Parties have reached agreement on the labor costs to be included in the 2007 test year revenue requirement for each Division. Thus, the Company and the Consumer Advocate also agree on the test year payroll expense of $1,319,000, which is comprised of $1,199,000 for the Maui Division, $53,000 for the Lanai Division and $67,000 for the Molokai Division (MECO T-13, Attachment 2, attached hereto).

INCOME TAXES

20. In its direct testimony (MECO T-13), the Company proposed a consolidated 2007 test year estimate for Income Taxes of $9,071,000 at present rates and $15,797,000 at proposed rates, as follows:

	Income Taxes	

	Direct Testimony		
	At Present Rates	At Proposed Rates	Source
Maui Division	$9,122,000	$15,415,000	MECO-1302
Lanai Division	-$175,000	$16,000	MECO-1302
Molokai Division	$124,000	$366,000	MECO-1302
Total Company	$9,071,000	$15,797,000	MECO-1302

In its June 2007 Update for MECO T-13, the Company indicated that its estimate of income taxes for the test year will be revised for revisions to the interest expense adjustment to reflect the revised 2007 test year estimate of AFUDC (see June 2007 update of MECO-WP-102) and revisions to the test year estimates of revenues and expenses at present rates and at proposed rates (MECO T-13, June 2007 Update, page 1).

In its direct testimony, the Consumer Advocate's estimate of income taxes for the test year was $9,883,000 (CA-101, Schedule C, page 1), which was $812,000 more than the Company's estimate at present rates. MECO and the Consumer Advocate used the same tax rates and methodology to compute the test year income tax expense. The difference between the Parties' estimates of income tax expense resulted primarily from the differing revenue and expense estimates, as discussed above, that contribute to higher taxable income in the Consumer Advocate's calculation. In addition, the Consumer Advocate recommended that MECO's estimated Domestic Production Activities Deduction ("DPAD") for test year 2007 be fixed at $1,127,000, resulting in a fixed estimated federal tax effect of $394,000.

During the settlement discussions, the Parties resolved this issue as explained in the "Section 199 Deduction," subparagraph 20.a. below. Based on the resolution of this issue and the settlement reached on the test year revenues and O&M expense projections as described herein, the Parties agree for purposes of settlement to a revised consolidated Income Tax expense estimate for the 2007 test year of $9,586,000 at present rates and $14,273,000 at proposed rates, as follows:

	Income Taxes Settlement Test Year Estimates	
	At Present Rates	At Proposed Rates
Maui Division	$9,672,000	$13,282,000
Lanai Division	-$184,000	$483,000
Molokai Division	$98,000	$508,000
Total Company	$9,586,000	$14,273,000

Reference: Statement of Probable Entitlement, page 1 of Exhibits 1, 2, 3 and 4.

a. <u>Section 199 Deduction</u>

MECO's response to CA-IR-376 included the calculation of the Company's test year Internal Revenue Code ("IRC") Section 199 deduction estimate. The Section 199 deduction resulted from the American Jobs Creation Act of 2004, which provided tax relief for U.S. based manufacturing activities, including the production of electricity. MECO's estimated Domestic Production Activities Deduction (DPAD) for test year 2007 was initially $1,127,000 for total MECO, and the estimated related federal tax effect was $394,000 (see MECO's response to CA-IR-376, page 3). The consolidated $394,000 was comprised of $362,000 for the Maui Division, $15,000 for the Lanai Division and $17,000 for the Molokai Division (allocated based on relative plant balances at 12/31/06 as shown in MECO's response to CA-IR-380, page 3).

In its direct testimony, the Consumer Advocate stated that MECO's Section 199 deduction calculation assumptions in its Update filing were overly conservative, but to simplify the issues in this proceeding, the Consumer Advocate did not propose any adjustments (see CA T-3, page 61). The Consumer Advocate accepted MECO's $394,000 estimate, but recommended that "...this value be fixed and not be revised for later changes in input values or the rate of return awarded by the Commission, because multiple complex and potentially offsetting adjustments are actually required to fully update the Section 199 deduction to mirror the methods used to actually calculate the deduction taken by the Company on its tax return." (See CA-T-3, page 62).

Although MECO did not agree with fixing the $394,000 estimate, as a result of settlement discussions, the Parties agree to an updated consolidated DPAD test year estimate of $1,061,000, and the estimated related federal tax effect of $371,000, which is comprised of $341,000 for the Maui Division, $14,000 for the Lanai Division and $17,000 for the Molokai Division (MECO T-13 Attachment 1, attached hereto). The agreed upon estimate reflects most, but not all, of the settlement test year estimates, and the Parties accept the updated DPAD estimate as reasonable for settlement purposes. The updated estimate increases consolidated income tax expenses by $23,000 ($394,000-$371,000=$23,000). The Consumer Advocate reserves the right to reconsider the attribution of indirect overheads within the calculation of DPAD in future rate case proceedings, as tax regulation uncertainties regarding the allocation of expenses that are supportive in function to production activity in the determination of the DPAD are resolved.

RATE BASE

21. Rate base represents the net investment that is used or useful for public utility purposes and that has been funded by the Company's investors. (See MECO T-15, page 2) MECO calculated an average rate base by dividing the sum of the 2006 and 2007 year-end balances for each component of rate base by two.

Investments in assets include all investments necessary to provide reliable electric service to MECO's customers. In direct testimony, MECO's investments in assets consisted of the following components: (1) net cost of plant in service, (2) property held for future use, (3) fuel inventory, (4) materials and supplies inventory, (5) unamortized net statements of financial accounting standards ("SFAS") No. 109 regulatory asset, (6) pension asset, (7) other post retirement benefits other than pensions ("OPEB") amount, (8) unamortized system development costs, and (9) working cash. (MECO T-15, page 3):

Funds from non-investors are funds that are invested in assets to provide reliable electric service that are from sources other than investors. In direct testimony, funds from non-investors consisted of the following components: (1) unamortized contributions in aid of construction ("CIAC"), (2) customer advances for construction, (3) customer deposits, (4) accumulated deferred income taxes, and (5) unamortized investment tax credits. (See MECO T-15, page 33):

The following reflects the Company estimated 2007 test year consolidated average rate base at present rates.

	Maui (MECO-1502)	Lanai (MECO-1508)	Molokai (MECO-1514)	MECO Consolidated (MECO-1501)
Net Plant in Service	$398,136,000	$15,187,000	$18,039,000	$431,361,000
Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Fuel Inventory	$14,629,000	$550,000	$632,000	$15,811,000
M&S Inventory	$11,263,000	$193,000	$195,000	$11,651,000
Unamortized Net SFAS 109 Regulatory Asset	$7,972,000	$429,000	$518,000	$8,918,000
Pension Asset	$3,093,000	$90,000	$139,000	$3,321,000
Unamortized System Development Costs	$217,000	$7,000	$10,000	$233,000
Working Cash at Present Rates	$7,343,000	$338,000	$295,000	$7,976,000
Unamortized CIAC	$(50,082,000)	$(1,983,000)	$(3,301,000)	$(55,365,000)
Customer Advances	$(4,271,000)	$(249,000)	$(154,000)	$(4,673,000)
Customer Deposits	$(3,601,000)	$(95,000)	$(187,000)	$(3,883,000)
Accumulated DIT	$(18,823,000)	$(782,000)	$(913,000)	(20,518,000)
Unamortized ITC	$(10,279,000)	$(428,000)	$(499,000)	$(11,205,000)
Average Rate base at Present Rates	$358,230,000	$13,257,000	$14,775,000	$386,261,000
Change in working cash	$(207,000)	$(6,000)	$(8,000)	$(221,000)
Average Rate base at Proposed Rates	$358,023,000	$13,251,000	$14,767,000	$386,040,000

Subsequently, MECO updated its test year consolidated estimate to $385,763,000 (see MECO response to CA-IR-304, Attachment A), based on updated rate base component amounts such as the replacement of 2006 year-end estimates with recorded amounts, updates to the 2007 test year estimates, and changes to working cash.

	Maui (CA-IR-304, Attachment A, page 12)	Lanai (CA-IR-304, Attachment A, page 25)	Molokai (CA-IR-304, Attachment A, page 38)	MECO Consolidated (CA-IR-304, Attachment A, page 3)
Net Plant in Service	$398,837,000	$15,450,000	$18,123,000	$432,410,000
Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Fuel Inventory	$14,629,000	$550,000	$632,000	$15,811,000
M&S Inventory	$10,436,000	$141,000	$178,000	$10,755,000
Unamortized Net SFAS 109 Regulatory Asset	$6,930,000	$379,000	$444,000	$7,753,000
Pension Asset	$2,989,000	$84,000	$143,000	$3,216,000
Working Cash at Present Rates	$7,121,000	$329,000	$282,000	$7,732,000
Unamortized CIAC	$(51,782,000)	$(2,006,000)	$(3,343,000)	$(57,131,000)
Customer Advances	$(4,963,000)	$(207,000)	$(126,000)	$(5,296,000)
Customer Deposits	$(3,413,000)	$(91,000)	$(177,000)	$(3,681,000)
Accumulated DIT	$(15,413,000)	$(640,000)	$(748,000)	$(16,801,000)
Unamortized ITC	$(10,676,000)	$(444,000)	$(518,000)	$(11,638,000)
Average Rate base at Present Rates	$357,328,000	$13,545,000	$14,890,000	$385,763,000
Change in working cash	$(174,000)	$(24,000)	$(15,000)	$(213,000)
Average Rate base at Proposed Rates	$357,154,000	$13,521,000	$14,875,000	$385,550,000

AVERAGE TEST YEAR RATE BASE COMPONENTS
NOT ADJUSTED BY THE CONSUMER ADVOCATE

	Maui	Lanai	Molokai	MECO Consolidated
Net Plant in Service	$398,837,000	$15,450,000	$18,123,000	$432,410,000
Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Materials and Supplies Inventory	$10,436,000	$141,000	$178,000	$10,755,000
Unamortized CIAC	$(51,782,000)	$(2,006,000)	$(3,343,000)	$(57,131,000)
Customer Advances	$(4,963,000)	$(207,000)	$(126,000)	$(5,296,000)
Customer Deposits	$(3,413,000)	$(91,000)	$(177,000)	$(3,681,000)

Unamortized ITC	$(10,676,000)	$(444,000)	$(518,000)	$(11,638,000)

Reference: MECO response to CA-IR-304, Attachment A, pages 3, 12, 25, and 38)

In its direct testimony, the Consumer Advocate recommended the following test year estimates for MECO's consolidated rate base.

	Maui (CA-102, Schedule B)	Lanai (CA-103, Schedule B)	Molokai (CA-104, Schedule B)	MECO Consolidated (CA-101, Schedule B)
Net Plant in Service	$398,837,000	$15,450,000	$18,123,000	$432,410,000
Property Held for Future Use	$2,633,000	$0	$0	$2,633,000
Fuel Inventory	$11,027,000	$550,000	$632,000	$12,209,000
M&S Inventory	$10,436,000	$141,000	$178,000	$10,755,000
Unamortized Net SFAS 109 Regulatory Asset	$6,930,000	$379,000	$444,000	$7,753,000
Pension Asset	$0	$0	$0	$0
Working Cash at Present Rates	$6,847,000	$321,000	$274,000	$7,442,000
Unamortized CIAC	$(51,782,000)	$(2,006,000)	$(3,343,000)	$(57,131,000)
Customer Advances	$(4,963,000)	$(207,000)	$(126,000)	$(5,296,000)
Customer Deposits	$(3,413,000)	$(91,000)	$(177,000)	$(3,681,000)
Accumulated DIT	$(16,198,000)	$(672,000)	$(786,000)	$(17,656,000)
Unamortized ITC	$(10,676,000)	$(444,000)	$(518,000)	$(11,638,000)
Average Rate base at Present Rates	$349,679,000	$13,421,000	$14,701,000	$377,800,000
Change in working cash	$(98,000)	$(3,000)	$(4,000)	$(105,000)
Average Rate base at Proposed Rates	$349,581,000	$13,418,000	$14,697,000	$377,696,000

As noted from a comparison of the above tables, the difference between MECO and the Consumer Advocate results from the following six adjustments proposed by the Consumer Advocate:

- an adjustment to remove from the test year rate base MECO's proposal to include the pension asset and the associated accumulated deferred income taxes ("ADIT") (see CA-101, Schedule B-2);
- an adjustment to reduce MECO's estimate of the Maui Division's fuel inventory for industrial fuel oil ("IFO") and diesel fuel due to the lower days inventory recommendation described in CA-T-2 (see CA-101, Schedule B-3);

- removal of MECO's proposal to include the ADIT associated with AFUDC in Construction Work in Progress ("CWIP") and tax capitalized interest ("TCI"), emission fees and IRP/DSM program costs (see CA-101, Schedule B-4);
- removal of MECO's proposal to treat the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP;
- an adjustment to correct MECO's estimated ADIT associated with emission fees (see CA-101, Schedule B-4); and
- removal of MECO's proposal to include the pension asset amortization and pension expense in the calculation of working cash (see CA-101,Schedule B-5).

Based on the discussion contained in the paragraphs 22-29 below, the Parties have reached agreement on each of these differences. In addition, the Parties have agreed on the implementation of a pension tracking mechanism and an OPEB tracking mechanism. As a result of these settlements, the Parties agree on the following 2007 test year average rate base estimates.

AVERAGE RATE BASE SETTLEMENT TEST YEAR ESTIMATE		
Division	Rate Base at Present Rates	Rate Base at Proposed Rates
Maui	$354,840,000	$354,721,000
Lanai	13,492,000	13,470,000
Molokai	14,791,000	14,777,000
MECO Consolidated	$383,123,000	$382,968,000

Reference: Statement of Probable Entitlement, page 1 of Exhibits 1, 2, 3, 4.

22. Pension Asset

MECO proposed to include $3,216,000 of pension asset in the test year average rate base (see June 2007 Update, MECO T-9, Attachment 5, page 1). The Consumer Advocate opposed the inclusion of the pension asset in rate base (CA-101, Schedule B-2). MECO and the Consumer Advocate agreed that the exclusion of all or a portion of the pension asset in rate base would also require a corresponding adjustment to the ("ADIT") reserve. The portion of ADIT associated with the pension asset amounted to $1,251,397 (CA-101, Schedule B-2).

The Parties took similar positions in Docket No. 04-0113 (HECO 2005 TY rate case) and Docket No. 2006-0386 (HECO 2007 TY rate case). In Amended Proposed Final Decision and Order No. 23768 in Docket No. 04-0113, the Commission ruled that HECO's pension asset should not be included in HECO's 2005 TY rate base based on the facts of the HECO situation. Although the Company respectfully disagrees with the conclusion of Amended Proposed Final Decision and Order No. 23768, for purposes of reaching a global settlement, MECO accepts the Consumer Advocate's proposed exclusion of the pension asset from rate base (with the reversal of the associated ADIT) in this proceeding.

23. Pension Tracking Mechanism
In the HELCO 2006 test year rate case (Docket No. 05-0315) and the HECO 2007 test year rate case (Docket No. 2006-0386), the Parties agreed to the implementation of a pension tracking mechanism. Similarly, in this proceeding, MECO and the Consumer Advocate agreed to the implementation of a pension tracking mechanism. Based on the facts and circumstances unique to each Company, the agreed to pension tracking mechanisms included a pension asset amortization for HELCO, but not for HECO. In the instant proceeding, however, the Consumer Advocate disagreed with MECO's proposal to include the pension asset amortization amounting to $241,800 in test year revenue requirements (CA-101, Schedule C-16). For purposes of settlement in this docket, MECO agreed to exclude the amortization of the test year ending pension amount. In addition, the Parties agree to modify the Consumer Advocate's proposed pension tracking mechanism to reflect a requirement for MECO to fund the minimum required level under the law until the existing pension asset balance is eliminated. Reduced funding would reduce the pension asset. When the existing pension asset amount is reduced to zero, the Company will fund the NPPC as specified in the pension tracking mechanism for MECO. If the existing pension asset amount is not reduced to zero by the next rate case, the Parties would address funding requirements for the pension tracking mechanism in that proceeding. MECO T-9, Attachment 2 (attached hereto) provides the terms of the pension tracking mechanism for MECO. The terms are the same as those agreed to by HECO and the Consumer Advocate in the HECO 2007 test year rate case (Stipulated Settlement Letter, filed September 5, 2007 in Docket No. 2006-0386, HECO T-10 Attachment 2).

24. OPEB Tracking Mechanism
For purposes of settlement, MECO and the Consumer Advocate also agreed to the implementation of an OPEB tracking mechanism in this case, consistent with the agreement reached in the HELCO 2006 test year rate case (Docket No. 05-0315) and the HECO 2007 test year rate case (Docket No. 2006-0386). MECO T-9, Attachment 3 (attached hereto) provides the terms of the OPEB tracking mechanism for MECO, which are the same as those agreed to by HECO and the Consumer Advocate in the HECO 2007 test year rate case (June 2007 Update, HECO T-10, Attachment 9 in Docket No. 2006-0386).

25. Fuel Inventory
In its direct testimony, MECO's estimate of consolidated test year fuel inventory value was $15,811,090, including $14,628,834 for the Maui Division, $549,917 for the Lanai Division, and $632,339 for the Molokai Division. (See MECO-408.) Based on an analysis of the fuel delivery process and MECO's historical inventory levels, MECO concluded that it needs to carry 37 days of Industrial Fuel Oil ("IFO") inventory and 30 days of diesel fuel inventory for the Maui Division to maintain a reliable fuel supply to its generating units, even if disruptions of reasonable scope occur in the supply chain. (See MECO T-4, pages 41-49; MECO-409.)

The Consumer Advocate performed its own analysis based partially on information provided in MECO's T-4 testimony and recommended that the Maui Division fuel inventory should be based on a 30-day supply of IFO (CA-T-2, pages 29-33; CA-208) and a 22-day supply of diesel fuel (CA-T-2, pages 33-36; CA-208). The Consumer Advocate's recommended inventory day supply of fuel was valued at $11,026,849 (CA-208, page 1), or $3,602,000 (rounded) below MECO's estimate of $14,628,834. Note that the Consumer Advocate did not oppose MECO's proposed fuel inventory levels of the Lanai and Molokai Divisions.

Although the Consumer Advocate continued to have concerns with the lack of support for MECO's proposed fuel inventory levels, for the purposes of reaching a global settlement on the test year revenue requirements for this proceeding, the Consumer Advocate agreed to reflect MECO's proposed $14,628,834 of fuel inventory in Maui Division in the test year average rate base on the condition that MECO would complete a fuel inventory study for submission to the Commission and the Consumer Advocate in its next rate case to support the Company's proposed fuel inventory levels.

26. Materials and Supplies Inventories

In its direct testimony, MECO included consolidated test year materials and supplies inventories of $11,651,000, including $11,263,000 for the Maui Division, $193,000 for the Lanai Division, and $195,000 for the Molokai Division. (See MECO-1504, MECO-1510, MECO-1516.) In its June Update, MECO reduced its consolidated test year estimate for materials and supplies inventories by $896,000 to $10,755,000, including $10,436,000 for the Maui Division, $141,000 for the Lanai Division, and $178,000 for the Molokai Division, to reflect more current recorded inventory values. (See CA-IR-304, Attachment 1, page 3.)

In its direct testimony, the Consumer Advocate did not contest MECO's June Update test year estimates for material and supplies inventories. (See CA-101, Schedule B.)

27. Accumulated Deferred Income Taxes

In its direct testimony (MECO T-13), the Company proposed an average consolidated credit balance of $20,518,000 for ADIT in the 2007 test year, which was comprised of $18,823,000 for the Maui Division, $782,000 for the Lanai Division and $913,000 for the Molokai Division (see MECO-1305, pages 5 and 6).

In its June 2007 Update for MECO T-13, the Company reduced its test year estimate of the consolidated ADIT average credit balance by $3,718,000 to reflect the: 1) actual 2006 recorded balances (also submitted in the Company's response to CA-IR-182), 2) estimated 2006 post year end adjustments, 3) the updated 2007 amounts for certain revised test year estimates of revenue and expenses, 4) the exclusion of the regulatory asset for AFUDC Equity gross up in CWIP as further explained in the Company's response to CA-IR-182, 5) the full inclusion of deferred taxes related to TCI as further explained in the Company's response to CA-IR-182, 6) the ratemaking adjustments for the reversal of Accumulated Other Comprehensive Income ("AOCI") as explained by Mr.

Matsunaga in MECO T-9 (see MECO T-9, pages 84 through 107), 7) the exclusion of deferred taxes on integrated resource planning (IRP/DSM) costs, consistent with the treatment in Docket No. 05-0315 (HELCO's 2006 test year rate case), and 8) the reclassification and adjustment of balances for proper presentation as explained in the Company's response to CA-IR-182. See the June 2007 update of MECO-1305 (Attachment 1, pages 9 and 10) and MECO-WP-1305 (Attachment 1, pages 11 and 12).

In its direct testimony, the Consumer Advocate recommended a consolidated test year average ADIT estimate of $17,656,000 (CA-101, Schedule B, page 1), resulting in a proposed increase of $856,000 to the Company's June 2007 Update estimate (a reduction of $2,862,000 from the Company's direct testimony estimated credit). The lower recommendation resulted from the following four adjustments proposed by the Consumer Advocate:

- an adjustment to remove the ADIT related to MECO's pension asset (see CA-101, Schedule B, page 2 and CA-101, Schedule B-2);
- an adjustment to restore the ADIT related to AFUDC and TCI (see CA-101, Schedule B, page 2 and CA-101, Schedule B-4);
- an adjustment to correct the ADIT related to emission fees (see CA-101, Schedule B, page 2 and CA-101, Schedule B-4); and
- an adjustment to reflect the ADIT on IRP/DSM program costs(see CA-101, Schedule B, page 2 and CA-101, Schedule B-4).

As a result of the settlement discussions, the Parties agree to a revised ADIT test year estimate of $17,213,000 for total MECO, which is comprised of $15,791,000 for the Maui Division, $656,000 for the Lanai Division and $766,000 for the Molokai Division (see Statement of Probable Entitlement, page 3 of Exhibits 1, 2, 3 and 4). The test year estimate is a $413,000 larger credit than MECO's June 2007 Update estimate of $16,800,000, and reflects the settlement of the above four issues as described below.

a. <u>ADIT related to MECO's pension asset</u>
Based on the settlement reached on the ratemaking treatment of the Company's pension asset as discussed in paragraph 22 above, the Parties agree that the ADIT related to the estimated pension asset should be removed from the test year rate base. (MECO T-13, Attachment 3, attached hereto).

b. <u>ADIT related to AFUDC and TCI</u>
<u>AFUDC</u> - The allowance for funds used during construction ("AFUDC") applied to the cost of a capital project is not recognized for tax purposes and is neither taxable income nor part of the depreciable tax basis of the asset. Consequently, deferred income taxes are provided on the amount of AFUDC incurred and recognized as income for book purposes but not for tax purposes.

TCI - The income tax law requires the cost of financing self constructed assets to be capitalized, which MECO refers to as tax capitalized interest ("TCI"). §263A of the Internal Revenue Code requires interest related to self constructed assets to be capitalized during the construction period. This interest capitalization is the source of a book/tax temporary difference and creates a negative deferred income tax.

In the Company's direct testimony, MECO excluded the ADIT related to AFUDC and TCI in Construction Work in Progress ("CWIP"), based upon the premise that CWIP is not included within rate base so the related ADIT balances should also be excluded. MECO's consolidated average ADIT estimate related to AFUDC in Construction Work In Progress ("CWIP") was $153,569, and the estimate related to TCI was $45,669 (MECO T-13, Attachment 3, attached hereto). In the June 2007 Update for MECO T-13, filed on August 24, 2007, the Company updated its consolidated test year estimate for AFUDC in CWIP to $1,074,620 (MECO T-13, Attachment 3, attached hereto) to reflect the 2006 recorded balances, estimated 2006 post year end adjustments, and updated 2007 amounts for AFUDC and property closed to plant in service. In updating its estimates, the Company eliminated the $1,074,620 ADIT on AFUDC in CWIP consistent with the direct testimony but did not eliminate the ADIT on TCI related to CWIP. Contrary to the direct testimony, MECO included the full amount of TCI, $3,752,558 in ADIT (MECO T-13, Attachment 3, attached hereto and MECO's response to CA-IR-182, pages 10-12). An attendant adjustment was also made to exclude the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP (see June 2007 Update, MECO T-13, Attachment 1, page 14, which is the updated MECO-1306 page 2). This exclusion decreased the 2007 average Unamortized Net FAS 109 Regulatory Asset by $1,207,000 (the average of $1,352,000 and $1,062,000) and decreased average ADIT by its tax effect of $469,579 (MECO T-13, Attachment 3, attached hereto).

In its response to CA-IR-377, the Company stated, "MECO has changed its position with respect to the deferred taxes related to AFUDC in CWIP and TCI in light of the settlement position in HECO Docket No. 2006-0386. In that case, HECO agreed to include in rate base all the deferred taxes associated with AFUDC and to similarly include all the deferred taxes associated with TCI". As a result, the Consumer Advocate proposed to restore the ADIT balances related to 1) AFUDC in CWIP, 2) the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP, and 3) TCI (see CA T-3, pages 63 and 64), but inadvertently did not propose to add back the adjustment to the Regulatory Asset itself for the AFUDC Equity Tax Gross Up related to AFUDC in CWIP.

As a result of settlement discussions the Parties agreed to restore the average ADIT balances totaling $1,544,199 (the previously mentioned $1,074,620 and $469,579) as proposed by the Consumer Advocate (see CA-101, Schedule B-4, lines 1-12). The $1,544,199 is comprised of $1,416,803 for the Maui Division, $58,679 for the Lanai Division and $68,717 for the Molokai Division (allocated based on relative plant balances at 12/31/06 as shown in MECO's response to CA-IR-380, page 3). In addition, the Parties agree to add back the average test year adjustment to the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP in the consolidated amount of $1,207,000 (i.e., ($1,352,000 + $1,062,000) ÷ 2) , which is comprised of $1,080,000 for the Maui Division, $57,000 for the Lanai Division and $70,000 for the Molokai Division (see June 2007 Update, MECO T-13, Attachment 1, pages 13 and 14) (see also the discussion under Unamortized Net SFAS 109 Regulatory Asset).

c. ADIT related to emission fees

Emission fees are accrued monthly for book purposes but are not deducted for tax purposes until paid to the State DOH by May 1st (extended due date) of the following year. This creates a temporary difference between the amount accrued in the current year (increases taxable income in current year) and the amount paid in the following year (decreases taxable income in the year fees are paid).

In the Company's direct testimony, MECO's consolidated average ADIT estimate related to emission fees was $167,080 (MECO T-13, Attachment 3, attached hereto). The amount was subsequently revised in the June 2007 Update for MECO T-13, to $293,431 to include actual 2006 recorded balances, estimated 2006 post year end adjustments, and updated 2007 amounts for certain revised test year estimates of revenue and expenses. As updated, the Company's estimated ADIT balances at December 31, 2007 with respect to emission fees included $331,476 for federal taxes and $60,612 for state taxes (MECO T-13, Attachment 3, attached hereto). In its response to CA-IR-379, MECO indicated that the ADIT balances associated with the estimated emission fees at December 31, 2007 were incorrect. The federal and state balances should have been $127,351 and $23,286, respectively.

As a result, the Consumer Advocate proposed to adjust the ADIT balances related to emission fees by a consolidated $120,727 (see CA-101, Schedule B-4, lines 13-21) to reflect the corrected December 31, 2007 estimated balances. The $120,727 consolidated average test year adjustment is comprised of $110,767 for the Maui Division, $4,588 for the Lanai Division and $5,372 for the Molokai Division (allocated based on relative plant balances at 12/31/06 as shown in MECO's response to CA-IR-380, page 3). MECO agrees with the Consumer Advocate's proposed adjustment, and the resulting consolidated test year ADIT estimate of $172,704 ($293,431-$120,727).

d. ADIT on IRP/DSM program costs

For book purposes, IRP/DSM program costs are deferred when incurred and expensed when the related revenues are collected. For tax purposes, DSM program costs are deducted when incurred. This creates a book/tax temporary difference.

In the Company's direct testimony, the Company's consolidated estimate of average ADIT on IRP/DSM program costs was $331,930 (MECO T-13, Attachment 3 attached hereto). The amount was subsequently revised in the June 2007 Update for

MECO T-13 to $441,482, based on MECO's proposal to exclude the ADIT on integrated resource planning costs from the test year (MECO T-13, Attachment 3, attached hereto and June 2007 Update, MECO T-13, page 2). As stated in MECO's response to CA-IR-182, page 8, "Over- and under-recovered balances of deferred DSM and IRP costs are not included in rate base, so the related deferred tax balances should also be excluded from rate base. This is consistent with HELCO's treatment of its DSM and IRP deferred taxes in Docket No. 05-0315."

In its written testimony, the Consumer Advocate disagreed with MECO, and proposed to include average ADIT on IRP/DSM program costs of $441,572 (see CA-101, Schedule B-4, lines 22-29. Note that the Consumer Advocate's estimate differs slightly from MECO's estimate because the Consumer Advocate used $68,429 instead of $68,249 as the IRP/DSM State Deferred Taxes balance at 12/31/2007.). On pages 66 and 67 of CA-T-3, the Consumer Advocate stated: "To fully account for the economic impact of IRP/DSM program spending and cost recovery, given the allowance of interest on gross pretax deferred costs, the deferred tax impacts must also be treated as jurisdictional and included in rate base (because they are not recognized when interest is accrued)."

For purposes of settlement, the Consumer Advocate accepts MECO's proposal to exclude from the test year ADIT the deferred taxes on integrated resource planning costs. This is consistent with the Consumer Advocate's position in Docket No. 05-0315. (See Docket No. 05-0315, CA-T-1, page 73, lines 7-13). Consideration should be given to allowing interest on only the net post-tax deferred IRP/DSM costs prospectively within reconciliation calculations that are performed, so as to recognize that ADIT balances associated with this temporary difference are being retained for shareholders as a result of rate base exclusion of such amounts.

28. <u>Unamortized Net SFAS 109 Regulatory Asset</u>
<u>Regulatory Asset – AFUDC Equity Gross Up</u>
As discussed more fully under the Accumulated Deferred Income Taxes section of this document with respect to the ADIT related to AFUDC and TCI, in the June 2007 Update for MECO T-13, filed on August 24, 2007, the Company eliminated ADIT on AFUDC in CWIP, but restored, to the full amount, the TCI in ADIT (MECO T-13, Attachment 3, attached hereto). An attendant adjustment was also made to exclude the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP (see June 2007 Update, MECO T-13, Attachment 1, page 14, which is the updated MECO-1306 page 2). This exclusion decreased 2007 average Unamortized Net FAS 109 Regulatory Asset by $1,207,000 (the average of $1,352,000 and $1,062,000) and decreased average ADIT by its tax effect of $469,579 (MECO T-13, Attachment 3, attached hereto).

In MECO's response to CA-IR-377, the Company stated, "MECO has changed its position with respect to the deferred taxes related to AFUDC in CWIP and TCI in light of the settlement position in HECO Docket No. 2006-0386. In that case, HECO agreed to include in rate base all the deferred taxes associated with AFUDC and to similarly include all the deferred taxes associated with TCI". As a result, the Consumer Advocate proposed to restore the ADIT balances related to 1) AFUDC in CWIP, 2) the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP, and 3) TCI (see CA T-3, pages 63 and 64), but inadvertently did not propose to add back the adjustment to the Regulatory Asset itself for the AFUDC Equity Tax Gross Up related to AFUDC in CWIP.

As discussed in the "ADIT related to AFUDC and TCI" section above, the Parties agree for settlement purposes to restore the average ADIT balances totaling $1,544,199 as proposed by the Consumer Advocate (see CA-101, Schedule B-4, lines 1-12). In addition, the Parties agree to add back the average test year adjustment to the Regulatory Asset for AFUDC Equity Tax Gross Up related to AFUDC in CWIP in the consolidated amount of $1,207,000, which is comprised of $1,080,000 for the Maui Division, $57,000 for the Lanai Division and $70,000 for the Molokai Division (see June 2007 Update, MECO T-13, Attachment 1, pages 13 and 14).

29. Working Cash

Working cash represents the net cash needed to recognize that electric service is provided before customers pay for such services. Working cash is comprised of the net of the revenue collection lag and the payment lag and is calculated by multiplying the net collection lag days by the average daily expenditure for each category of payment lag and then summing the product of each category. (See MECO T-15, pages 16-19.)

In its direct testimony, MECO included six categories of payment lag: fuel purchases, O&M labor, purchased power, O&M non-labor, revenue taxes and income taxes. The test year estimate of working cash at present and proposed rates was $7,343,000 and $7,136,000 for Maui Division (MECO-1507), $338,000 and $332,000 for the Lanai Division ((MECO-1513), and $295,000 and $287,000 for the Molokai Division (MECO-1519). The consolidated test year estimate of working cash for MECO was $7,976,000 at present rates and $7,755,000 at proposed rates (MECO-WP-2001, page 2).

These amounts were subsequently updated in the June 2007 Update (MECO T-15), to reflect the updated test year expense amounts presented by other witnesses in their June 2007 Updates and responses to information requests. The Company also proposed adjustments to the working cash calculation as a result of its proposed pension and OPEB tracking mechanisms. The pension tracking mechanism proposed in the Company's June 2007 Update (MECO T-9) required MECO to make contributions to the pension plan equal to the net periodic pension cost. Therefore, the Company proposed a payment lag of 14 days for pension expense based on the anticipated monthly payments that would be made upon implementation of the pension tracking mechanism. However, the Company stated that if the pension tracking mechanism is not implemented, the payment lag for pension expense would be zero, as previously submitted in direct testimony. The pension tracking mechanism also proposed amortization of the pension asset in rate base over a five year period. Therefore, the Company proposed inclusion of the pension amortization expense as a separate component of working cash with a revenue collection lag of 36 days consistent with all other working cash items and a payment lag of zero.

The proposed OPEB tracking mechanism required MECO to make contributions to the OPEB plan equal to the net periodic benefit cost. The Company proposed a payment lag of 84 days for OPEB expense based on the anticipated quarterly payments that would be made to the OPEB trust accounts. However, the Company stated that if the OPEB tracking mechanism is not implemented, the payment lag for OPEB expense would be zero as previously submitted in direct testimony. (See June 2007 Update, MECO T-15, pages 2-4.)

In its written testimony, the Consumer Advocate maintained that absent a link between pension accruals and recurring fund contributions, the pension accrual is nothing more than another non-cash expense. The Consumer Advocate recommended removal of this item from the lead lag study, absent plans or a study that specifically analyzes pension cash flows. With respect to OPEB accruals, the Consumer Advocate stated that Decision and Order No. 13659 required MECO to fund its entire postretirement benefit costs to the maximum extent possible and that MECO had made recurring annual contributions to external funds since the issuance of Decision and Order No. 13659. As a result, the Consumer Advocate recommended rejection of a proposal to link the value of the OPEB payment lag to whether the Commission adopts the OPEB tracking mechanism but recognized in its working cash calculation an 84-day payment lag for OPEB. (See CA-T-1, pages 112-113.)

Based on the settlement reached with regard to the exclusion of the "Pension Asset" from the test year revenue requirement and the implementation of a "Pension Tracking Mechanism" as discussed in paragraphs 22-23 above, the Company agrees to exclude the pension expense and pension asset amortization from the working cash calculation and to utilize an 84-day payment lag for OPEB in the calculation of the O&M non-labor payment lag.

The revised O&M non-labor payment lag days estimate, as a result of incorporating the above discussed items, is 37 days (see MECO T-15, Attachment 1, attached hereto). This payment lag was calculated on a consolidated basis and is applied to each division. This methodology is consistent with MECO's presentation in direct testimony (MECO T-15), in the June 2007 Update for MECO T-15, and other MECO rate cases. Other differences in the working cash resulted from differences in the related expense items. For purposes of settlement, the Parties agree to an O&M non-labor payment lag of 37 days and to the following test year working cash amounts at present and proposed rates.

	Working Cash Settlement Test Year Estimates (000s)	
	At Present Rates	At Proposed Rates
Maui Division	$6,921	$6,802
Lanai Division	$319	$297

Molokai Division	$273	$259
Total Company	$7,513	$7,358

Reference: Statement of Probable Entitlement, page 3 of Exhibit 1, 2, 3 and 4.

COST OF CAPITAL

30. Capitalization
MECO proposed the following capitalization amounts and weights in direct testimony (MECO-1701; see also MECO T-17, Attachment 1, attached hereto):

	Amounts ($000)	Weights (%)
Short-term debt	4,750	1.27
Long-term debt	150,585	40.15
Hybrid securities	9,192	2.45
Preferred stock	4,693	1.25
Common stock	205,882	54.89

The Consumer Advocate agreed to utilize the capital structure proposed by MECO. (See CA-T-4, page 3.)

31. Cost of Capital. There were no differences between MECO and the Consumer Advocate with respect to the cost rates for short-term debt, long-term debt, hybrid securities and preferred stock. (See MECO-1701 and CA-413.) The weighted earnings requirement for short-term debt, long-term debt, hybrid securities and preferred stock is the same for MECO and the Consumer Advocate. (See MECO-1701, CA-T-4, page 3 and CA-413.) The Parties agree to the capital structure as discussed above, therefore there are no differences related to the weighted earnings requirements for short-term debt, long-term debt, hybrid securities and preferred stock.

32. Return on Common Equity and Composite Cost of Capital
In MECO's 2007 test year rate case direct testimony, MECO recommended a rate of return on common equity of 11.25% in direct testimony.[8] (See MECO T-17, page 52.) This resulted in an overall cost of capital of 8.98%. (See MECO-1701.) The Consumer Advocate proposed that the cost of common equity for MECO is within a broad range of

[8] In the settlement negotiations, the Company also provided supplemental information regarding its credit ratings. See MECO's response to CA-IR-5, revised September 13, 2007 pages 8 to 11 for a copy of the Standard and Poor's article that discusses MECO's downgrade. See Docket No. 2006-0386, HECO 2007 Test Year Rate Case, August 2007 Supplement (September 6, 2007), HECO T-19, Attachment 4, for a copy of the Moody's article dated December 21, 2006.

9.00% to 11.00%, but proposed to use the middle portion of this range and thus recommended a range of 9.50% to 10.50% for the rate of return on common equity. (See CA-T-4, pages 4-5.) This resulted in an overall cost of capital in the range of 8.02% to 8.57% (8.29% mid-point which incorporates a cost of common equity of 10.00%). (See CA-T-4, page 5.) The Consumer Advocate's specific cost of capital recommendation for MECO was 8.29%. (See CA-T-4, page 5.)

For the purpose of reaching a global settlement in this rate case, MECO and the Consumer Advocate agree on a rate of return on common equity of 10.7% for the test year. This results in a composite cost of capital of 8.67%. (See MECO T-17, Attachment 1, attached hereto. The 10.7% return on common equity is the same as that found reasonable by the Commission for purposes of interim rate relief in Docket No. 04-0113, HECO's 2005 test year rate case. (See Interim Decision and Order No. 22050 filed September 27, 2005, page 6 to 7.) In addition, in Docket No. 04-0113, Amended Proposed Decision and Order No. 23768 included a statement the Commission found the 10.7% cost of common equity to be reasonable (at 75). (The Commission also accepted a 10.7% return on common equity for purposes of interim rate relief in HECO's 2007 test year rate case, Docket No. 2006-0386 (see Interim Decision and Order No. 23749 filed October 22, 2007, page 9) and HELCO's 2006 test year rate case, Docket No. 05-0315 (see Interim Decision and Order No. 23342 filed April 4, 2007).

COST OF SERVICE/RATE INCREASE ALLOCATION/RATE DESIGN

33. MECO and the Consumer Advocate are addressing cost of service/rate design issues separately and intend to make a later submission covering these subjects which do not affect the revenue requirements.

Maui Electric Company, Ltd.
Docket No. 2006-0387
Test Year 2007
Estimation of Test Year Revenue at Present Rates

MECO T-3
ATTACHMENT 1
PAGE 1 OF 1
FINAL SETTLEMENT

	Maui Division ($000)				
Rate Schedule	Forecast MWh	Base	FCS	FOA	Total
R	430,167	$61,938.5	($47.8)	$60,025.5	$121,916.2
G	96,193	$16,402.7	($12.6)	$13,422.8	$29,812.9
J	268,193	$37,633.5	($28.9)	$37,423.6	$75,028.2
H	21,075	$2,971.1	($2.3)	$2,940.8	$5,909.6
P	391,961	$44,325.6	($34.1)	$54,694.2	$98,985.7
F	5,340	$676.6	($0.5)	$745.1	$1,421.2
Total	1,212,929	$163,948.0	($126.2)	$169,252.0	$333,073.8

	Lanai Division ($000)				
Rate Schedule	Forecast MWh	Base	FCS	FOA	Total
R	8,182.7	$1,593.1	$0.0	$1,138.5	$2,731.6
G	1,949	$454.0	$0.0	$271.2	$725.2
J	6,215	$1,389.2	$0.0	$864.6	$2,253.8
H	545	$104.7	$0.0	$75.8	$180.5
P	12,773.9	$2,361.5	$0.0	$1,777.2	$4,138.7
F	113.7	$21.1	$0.0	$15.8	$36.9
Total	29,779.3	$5,923.6	$0.0	$4,143.1	$10,066.7

	Molokai Division ($000)				
Rate Schedule	Forecast MWh	Base	FCS	FOA	Total
R	13,077.0	$2,493.9	$0.0	$2,062.8	$4,556.7
G	3,954	$1,080.0	$0.0	$623.7	$1,703.7
J	8,025	$1,565.9	$0.0	$1,265.9	$2,831.8
H	1,994	$328.8	$0.0	$314.6	$643.4
P	9,019.4	$1,312.2	$0.0	$1,422.7	$2,734.9
F	478.5	$85.4	$0.0	$75.5	$160.9
Total	36,548.1	$6,866.2	$0.0	$5,765.2	$12,631.4

	MECO Consolidated ($000)				
Rate Schedule	*Forecast MWh*	*Base*	*FCS*	*FOA*	*Total*
R	451,427	$66,025.5	-$47.8	$63,226.8	$129,204.5
G	102,096	$17,936.7	-$12.6	$14,317.7	$32,241.8
J	282,433	$40,588.6	-$28.9	$39,554.1	$80,113.8
H	23,614	$3,404.6	-$2.3	$3,331.2	$6,733.5
P	413,754	$47,999.3	-$34.1	$57,894.1	$105,859.3
F	5,932	$783.1	-$0.5	$836.4	$1,619.0
Total	1,279,256	$176,737.8	($126.2)	$179,160.3	$355,771.9

Maui Electric Company, Limited
Docket No. 2006-0387

Outside Services	**MECO Consolidated**	**Maui Division**	**Lanai Division**	**Molokai Division**
2003 Actual	$1,743,644	$1,586,781	$36,718	$120,145
2004 Actual	1,647,832	1,388,997	91,781	167,055
2005 Actual	1,174,109	927,875	76,472	169,762
2006 Actual	1,257,482	1,130,266	24,085	103,131
2007 Forecast	2,071,455	1,847,740	46,315	177,400
Total	$7,894,522	$6,881,659	$275,371	$737,493
Number of Periods	5	5	5	5
Five-Year Average	$1,578,904	$1,376,332	$55,074	$147,499
MECO Test Year Forecast	(2,071,455)	(1,847,740)	(46,315)	(177,400)
Adjustment Based on 5-Year Average	($492,551)	($471,408)	$8,759	($29,901)
CA Adjustment (Exhibits CA-101 to CA-104, Schedule C-19)	($570,440)	($545,780)	$2,642	($27,302)
Difference Between 5-Year Average and CA Adjustment	$77,889	$74,372	$6,117	($2,599)
	(492,551)	(471,408)	8,759	(29,901)

Note that MECO also proposed an additional $100,000 reduction to the Consumer Advocate's adjustment to outside services expenses to offset higher than budgeted annual production maintenance expenses in 2007 which resulted in a total proposed reduction of $177,889. The Consumer Advocate only agreed to a consolidated adjustment of $77,889 to reflect the five-year average.

Sources: CA-IR-114, CA-IR-135 (revised 9/11/07) & CA-IR-338.

Maui Electric Company, Limited
Docket No. 2006-0387
Division Allocation of Outside Services Adjustment

Outside Services	MECO Consolidated	Maui Division	Lanai Division	Molokai Division
TRANSMISSION OPERATIONS	$160,000	160,000		
TRANSMISSION MAINTENANCE	$487,732	484,732		3,000
DISTRIBUTION OPERATIONS	$316,940	293,225	17,715	6,000
DISTRIBUTION MAINTENANCE	$1,106,783	909,783	28,600	168,400
2007 Forecast	2,071,455	1,847,740	46,315	177,400
Total				
TRANSMISSION OPERATIONS	8.66%	8.66%	0.00%	0.00%
TRANSMISSION MAINTENANCE	27.92%	26.23%	0.00%	1.69%
DISTRIBUTION OPERATIONS	57.50%	15.87%	38.25%	3.38%
DISTRIBUTION MAINTENANCE	205.92%	49.24%	61.75%	94.93%
2007 Forecast	300.00%	100.00%	100.00%	100.00%
Total Nonlabor Reduction:	($492,551)	(471,408)	8,759	(29,901)
Allocation by Account Block				
TRANSMISSION OPERATIONS	($40,820)	(40,820)	$0	$0
TRANSMISSION MAINTENANCE	($124,174)	(123,668)	$0	($506)
DISTRIBUTION OPERATIONS	($72,471)	(74,810)	$3,350	($1,011)
DISTRIBUTION MAINTENANCE	($255,086)	(232,110)	$5,409	($28,384)
2007 ADJUSTMENT TO FORECAST	(492,550)	(471,408)	8,759	(29,901)
CA Adjustment (Exhibits CA-101 to CA-104, Schedule C-19)	($570,440)	($545,780)	$2,642	($27,302)
Difference Between 5-Year Average and CA Adjustment	$1,062,990	$1,017,188	($11,401)	$57,203

Note that MECO also proposed an additional $100,000 reduction to the Consumer Advocate's adjustment to outside services expenses to offset higher than budgeted annual production maintenance expenses in 2007 which resulted in a total proposed reduction of $177,889.

Sources: CA-IR-114, CA-IR-135 (revised 9/11/07) & CA-IR-338.

MAUI ELECTRIC COMPANY
DOCKET NO. 2006-0387
INCREMENTAL IRP EXPENSES IN BASE RATES
FOR THE FORECAST 2007 TEST YEAR

CONSOLIDATED

LINE NO.	DESCRIPTION		REFERENCE	AMOUNT	
	(A)		(B)	(C)	
1	Actual Non-labor Incremental IRP Expenses Incurred by MECO:				
2		Actual 2005 Amount (Total amount less Labor and Labor Overhead)	MECO-WP-812, p.1	$	590,813
3		Actual 2006 Amount (Total amount less Labor and Labor Overhead)	CA-IR-411, Att.C, p.2		604,191
4		Actual 2007 Year-to-date August (Total amount less Labor and Labor Overhead)	CA-IR-411, Att.C, p.2		198,585
5		Actual 2007 Year-to-date August + Remaining Months	CA-IR-362 updated 9/27/07		401,082
6	Revised Three-year Average Non-labor IRP spending		Average Lines 2, 3, 5	$	532,029
7	Less:	Non-labor IRP Expense Proposed by MECO	MECO-WP-812, p.2		695,844
8	**ADJUSTMENT TO REVISE MECO IRP**		Line 6 - Line 7	**$**	**(163,815)**
9	**NORMALIZATION ADJUSTMENT**				
				Rounded	
				$	**(164,000)**

MAUI ELECTRIC COMPANY
DOCKET NO. 2006-0387
INCREMENTAL IRP EXPENSES IN BASE RATES
FOR THE FORECAST 2007 TEST YEAR

MAUI DIVISION

LINE NO.	DESCRIPTION		REFERENCE	AMOUNT
	(A)		(B)	(C)
1	Actual Non-labor Incremental IRP Expenses Incurred by MECO:			
2		Actual 2005 Amount (Total amount less Labor and Labor Overhead)	MECO-WP-812, p.1	$ 590,813
3		Actual 2006 Amount (Total amount less Labor and Labor Overhead)	CA-IR-411, Att.C, p.2	604,191
4		Actual 2007 Year-to-date August (Total amount less Labor and Labor Overhead)	CA-IR-411, Att.C, p.2	198,585
5		Actual 2007 Year-to-date August + Remaining Months	CA-IR-362 updated 9/27/07	401,082
6	Revised Three-year Average Non-labor IRP spending		Average Lines 2, 3, 5	$ 532,029
7	Less:	Non-labor IRP Expense Proposed by MECO	MECO-WP-812, p.2	695,844
8	**ADJUSTMENT TO REVISE MECO IRP**		Line 6 - Line 7	**$ (163,815)**
9	**NORMALIZATION ADJUSTMENT**			
				Rounded
				$ (164,000)

Maui Electric Company, Ltd.
Account No. 920 - Administrative and General Salaries Expenses - Allocation by Division
Final Settlement
$000

	Maui	Lanai	Molokai	MECO Consolidated
June 2007 Update	2,140.0	-	11.5	2,151.5
C-9 Payroll Expense Adjustment	(1.9)			(1.9)
C-20 Ho'omaika'I Awards Adjustment *	(22.7)	(0.6)	(1.2)	(24.5)
Final Settlement	2,115.4	(0.6)	10.3	2,125.1

* Note: The Final Settlement amount for Account No. 920 for Lanai Division shown above is -$0.6. The negative amount for Lanai Division resulted from the Consumer Advocate's adjustment, in Exhibit CA-101, Schedule C-20, which allocated the adjustment to Ho'omaika'i award costs to the Maui, Lanai and Molokai divisions using the allocation percentages provided in the Company's response to CA-IR-373.

PENSION TRACKING MECHANISM

Purpose: The proposed pension tracking mechanism is designed to achieve the following objectives:

A. Ensure that the pension costs recovered through rates are based on the FAS87 NPPC, as reported for financial reporting purposes;

B. Ensure that all amounts contributed to the pension trust funds (subject to the exceptions in Item 3 below) are in an amount equal to actual NPPC (after the pension asset is reduced to zero as provided in Item 2 below) and are recoverable through rates; and

C. Clarify the future treatment of any charges that would otherwise be recorded to equity (e.g., increases/decreases to other comprehensive income) as required by FAS87, FAS158 or any other FASB statement or procedure relative to the recognition of pension costs and/or liabilities.

Procedure:

1. The amount of FAS87 NPPC included in rates shall be equal to the amount recognized for financial reporting purposes.

2. Until the pension asset is reduced to zero, the Company would be required to fund the minimum required level under the law. Thereafter, except when limited by the ERISA minimum contributions requirements or the maximum contribution imposed by the IRC, or the contribution exceeds the NPPC for a reason provided in Item 3, the annual contribution to the pension trust fund will be equal to the amount of FAS87 NPPC.

3. The utility will be allowed to recover through rates the amount of any contributions to the pension trust in excess of the FAS87 NPPC that were made for the following reasons[1]:

   - the minimum required contribution is greater than the FAS 87 NPPC,

   - the increased contribution was made to avoid a significant increase in Pension Benefit Guaranty Corporation (PBGC) variable premiums,

   - the increased contribution was made to avoid a charge to other comprehensive income, or

[1] The Company or the Consumer Advocate (jointly, the "Parties") may initiate discussions with the Parties and the Hawaii Public Utilities Commission to modify these provisions between rate cases (with Commission approval) if there are future changes in accounting standards, federal tax law or federal tax regulations that materially impact the costs otherwise recoverable through this tracking mechanism.

- the increased contribution was made to avoid: (i) higher minimum contribution requirements under the Pension Protection Act,[2] or (ii) other adverse funding requirements under federal pension regulations (provided funding does not exceed 100% of the PBO as a result). The recoverability of any discretionary contributions (as described under this bullet item) shall be subject to review in the Company's next rate case.

Any such "excess" contributions shall be recorded in a separate regulatory asset account, which will be included in rate base.

4. A regulatory asset (or liability) will be established on the Company's books to track the difference between the level of actual FAS87 NPPC during the rate effective period and the level of FAS87 NPPC included in rates during that same period.

   - The amortization of any unamortized cumulative net ratepayer benefit at the end of the test year in the next MECO rate case shall be determined in that rate case proceeding.

   - If the actual FAS87-determined NPPC recorded during a given rate-effective period is greater than the FAS87 NPPC included in rates during the immediately preceding rate case, the Company will establish a separate regulatory asset account to accumulate such difference, but only to the extent that such amount is <u>not</u> used to reduce a regulatory liability recorded pursuant to Item 5.

   - If the actual FAS87-determined NPPC recorded during the rate-effective period, adjusted for any amount of such expense used to reduce a regulatory liability maintained pursuant to Item 5, is less than the expense built into rates, the Company will establish a separate regulatory liability account to accumulate such difference.

   - If the actual FAS87 NPPC becomes negative, the regulatory liability will be increased by the difference between the level of FAS87 NPPC included in rates for that period and "zero" (i.e., $0).

   - Since this is considered to be a <u>cash</u> item under the tracking mechanism, the regulatory asset or liability will be included in rate base and amortized over a five (5) year period at the time of the next following rate case.

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[2] Transitional relief applies under the Pension Protection Act if the plan's target liability funded level meets the prescribed phase-in percentages for 2008 through 2011. The Parties recognize that such transitional relief or related requirements may be subject to change or revision in future years.

5. If the FAS87 NPPC becomes negative, the Company will set up a regulatory liability to offset the prepaid pension asset created by the negative amount. This regulatory liability will increase by the amount of any negative NPPC, or decrease by the amount of positive NPPC, in each subsequent year. Positive NPPC in each subsequent year will be used to reduce the regulatory liability before being used to establish a regulatory asset pursuant to Item 4.

   - If NPPC is negative at the time of the next rate case, the amount included in rates will be "zero" (i.e., $0).

   - If NPPC is positive at the time of the next rate case, the positive expense will not be included in rates and the Company will not be required to make contributions to the trust until any regulatory liability created under this Item 5 has been reduced to "zero" (i.e., $0).

   - Since this regulatory liability is considered to be a non-cash item under the tracking mechanism, it is not subjected to amortization and should not be recognized in determining rate base in future years.

6. The objective of this tracking mechanism is that, over time, the Company will recover through rates FAS87-based NPPC, including the amortization of unrecognized amounts as set forth above.

   - The Company will establish a separate regulatory asset/liability account to offset any charge, or credit, that would otherwise be recorded against equity (e.g., decreases to other comprehensive income) caused by applying the provisions of FAS87, FAS158 or any other FASB statement or procedure that requires accounting adjustments due to the funded status or other attributes of the Company's pension plan.

   - This regulatory asset/liability will not be amortized into rates or included in rate base, because any such charges are expected to be recovered in rates through the valuation of FAS87 NPPC in future accounting periods, which will be subject to the true-up process described herein. In other words, this regulatory asset/liability will automatically be reversed through the mechanics of FAS87 and, pursuant to other provisions of this proposal, all FAS87-determined NPPC will over time ultimately be recovered from ratepayers.

   - The regulatory asset/liability will increase or decrease each year by the same amount that the equity charge increases or decreases.

7. Recognizing that rate cases do not typically occur on a five-year cycle, the Company will continue to record any amortizations allowed herein throughout the effective term that the approved rates remain in effect, regardless of whether the term is longer or shorter than five years.

    - The Company will be required to establish a separate regulatory asset or liability to accumulate any excess negative amortization or positive amortization (separate from the pension asset existing at the adoption of the tracking mechanism), which shall be included in rate base and amortized over a five year period in the next following rate case.

8. Any prepaid pension asset or accrued liability recorded pursuant to the terms and conditions of FAS87 (as opposed to regulatory assets arising from the provisions of this proposed tracking mechanism) will not be included in Rate Base in any future rate case, except for the cumulative net ratepayer benefits previously identified is allowed by the Commission. The regulatory assets/liabilities discussed herein specifically identify all rate base includable amounts for pension differences.

Comments & Clarifications
Proposed Pension Tracking Mechanism

1. The proposed tracking mechanism refers to "NPPC" in explaining how the mechanism operates, which is intended to represent actuarially determined total FAS87 net periodic costs.

2. "NPPC" intentionally encompasses total actuarially determined amounts without regard to any expense allocation or capitalization accounting the Company may recognize on its books and records.

3. Unless limited by IRC maximum contributions or ERISA minimum contributions, the proposed tracking mechanism requires the Company to make annual fund contributions in an amount equal to the total FAS87 net periodic costs determined for each calendar year.

4. The proposed tracking mechanism requires the Company to establish a regulatory asset or liability for the difference between the total FAS87 net periodic costs determined for a given year and the amount of such costs included in then-existing utility rates.

5. The provisions of FAS87 may require a Company to record a prepaid pension asset in the normal course of business, without regard to any regulatory agreements or orders adopting a tracking mechanism:

a. The proposed tracking mechanism would exclude from rate base for ratemaking purposes any future prepaid pension asset resulting from an actuarial study that resulted in "negative" net periodic costs.

b. The proposed tracking mechanism would exclude, or not recognize, any "negative" net periodic costs for ratemaking purposes, instead setting the amount equal to "zero" (i.e., $0).

6. If the utility is allocated a portion of the FAS87 net periodic costs from an affiliated entity in the normal course of business and the tracking mechanism is approved by the Commission, when the Company is required to fund the NPPC, the Company would be required to commit to funding 100% of the FAS87 net periodic costs for both MECO and the affiliate or to maintain segregated pension trust fund accounting for each entity in order to avoid any funding conflicts or issues that might arise in the future.

7. Any commitment by MECO to fund 100% of its FAS87 net periodic costs (when required under item 2 or as limited under item 3) will not be contingent on implementing a substantially similar tracking mechanism for each MECO affiliate.

PROPOSED OPEB TRACKING MECHANISM

Purpose: The proposed OPEB tracking mechanism is designed to achieve the following objectives:

A. Ensure that the OPEB costs recovered through rates are based on the FAS106 NPBC, as reported for financial reporting purposes;

B. Ensure that all amounts contributed to the OPEB trust funds (subject to the exception in Item 3 below) are in an amount equal to actual NPBC and are recoverable through rates; and

C. Clarify the future treatment of any charges that would otherwise be recorded to equity (e.g., increases/decreases to other comprehensive income) as required by FAS106, FAS 158 or any other FASB statement or procedure relative to the recognition of OPEB costs and/or liabilities.

Procedure:

1. The amount of FAS106 NPBC included in rates shall be equal to the amount recognized for financial reporting purposes.

2. Except when limited by material, adverse consequences imposed by federal regulations, the annual contribution to the OPEB trust funds will be equal to the amount of FAS106 NPBC. The utility will use tax advantaged funding vehicles, whenever possible, as specified in D&O 13659, dated November 29, 1994, in Docket Nos. 7243 and 7233 (Consolidated).

3. The utility will be allowed to recover through rates the amount of any contributions to the OPEB trusts in excess of the FAS106 NPBC that were made for the following reason[1]:

    - the increased contribution was made to avoid a charge to other comprehensive income.

    Any such "excess" contributions shall be recorded in a separate regulatory asset account, which will be included in rate base.

4. A regulatory asset (or liability) will be established on the Company's books to track the difference between the level of actual FAS106 NPBC during the rate effective period and the level of FAS106 NPBC included in rates during that same period.
    - If the actual FAS106-determined NPBC recorded during a given rate-effective

[1] The Company or the Consumer Advocate (jointly, the "Parties") may initiate discussions with the Parties and the Hawaii Public Utilities Commission to modify these provisions between rate cases (with Commission approval) if there are future changes in accounting standards, federal tax law or federal tax regulations that materially impact the costs otherwise recoverable through this tracking mechanism.

period is greater than the FAS106 NPBC included in rates during the immediately preceding rate case, the Company will establish a separate regulatory asset account to accumulate such difference, but only to the extent that such amount is not used to reduce a regulatory liability recorded pursuant to Item 5.

- If the actual FAS106-determined NPBC recorded during the rate-effective period, adjusted for any amount of such expense used to reduce a regulatory liability maintained pursuant to Item 5, is less than the expense built into rates, the Company will establish a separate regulatory liability account to accumulate such difference.

- If the actual FAS106 NPBC becomes negative, the regulatory liability will be increased by the difference between the level of FAS106 NPBC included in rates for that period and "zero" (i.e., $0).

- Since this is considered to be a cash item under the tracking mechanism, the regulatory asset or liability will be included in rate base and amortized over a five (5) year period at the time of the next following rate case.

5. If the FAS106 NPBC becomes negative, the Company will set up a regulatory liability to offset the OPEB asset created by the negative amount. This regulatory liability will increase by the amount of any negative NPBC, or decrease by the amount of positive NPBC, in each subsequent year. Positive NPBC in each subsequent year will be used to reduce the regulatory liability before being used to establish a regulatory asset pursuant to Item 4.

   - If NPBC is negative at the time of the next rate case, the amount included in rates will be "zero" (i.e., $0).

   - If NPBC is positive at the time of the next rate case, the positive expense will not be included in rates and the Company will not be required to make contributions to the trust until any regulatory liability created under this Item 5 has been reduced to "zero" (i.e., $0).

   - Since this regulatory liability is considered to be a non-cash item under the tracking mechanism, it is not subjected to amortization and should not be recognized in determining rate base in future years.

6. The objective of this tracking mechanism is that, over time, the Company will recover through rates FAS106-based NPBC, including the amortization of unrecognized amounts as set forth above.
   - The Company will establish a separate regulatory asset/liability account to offset any charge, or credit, that would otherwise be recorded against equity (e.g.,

increases/decreases to other comprehensive income) caused by applying the provisions of FAS106, FAS158 or any other FASB statement or procedure that requires accounting adjustments due to the funded status or other attributes of the Company's OPEB plans.

- This regulatory asset/liability will not be amortized into rates or included in rate base, because any such charges are expected to be recovered in rates through the valuation of FAS106 NPBC in future accounting periods, which will be subject to the true-up process described herein. In other words, this regulatory asset/liability will automatically be reversed through the mechanics of FAS106 and, pursuant to other provisions of this proposal, all FAS106-determined NPBC will over time ultimately be recovered from ratepayers.

- The regulatory asset/liability will increase or decrease each year by the same amount that the equity charge increases or decreases.

7. Recognizing that rate cases do not typically occur on a five-year cycle, the Company will continue to record any amortizations allowed herein throughout the effective term that the approved rates remain in effect, regardless whether the term is longer or shorter than five years.

    - If the rate effective period is less than five years, the Company will be allowed to recover any unamortized and unrecovered amounts in the next following rate case over a five year period and any unamortized balance shall be included in rate base.

    - If the rate effective period is greater than five years, the Company will be required to establish a separate regulatory asset or liability to accumulate any excess amortization, which shall be included in rate base and amortized over a five year period in the next following rate case.

8. Any OPEB asset or accrued liability recorded pursuant to the terms and conditions of FAS106 (as opposed to regulatory assets arising from the provisions of this proposed tracking mechanism) will <u>not</u> be included in Rate Base in any future rate case. The regulatory assets/liabilities discussed herein specifically identify all rate base includable amounts for OPEB differences.

Comments & Clarifications
Regarding the Proposed OPEB Tracking Mechanism

1. The proposed tracking mechanism refers to "NPBC" in explaining how the mechanism operates, which is intended to represent actuarially determined total FAS106 net periodic costs.

2. "NPBC" intentionally encompasses total actuarially determined amounts without regard to any expense allocation or capitalization accounting the Company may recognize on its books and records.

3. Unless limited by adverse consequences under federal regulations, the proposed tracking mechanism requires the Company to make annual fund contributions in an amount equal to the total FAS106 net periodic costs determined for each calendar year.

4. The proposed tracking mechanism requires the Company to establish a regulatory asset or liability for the difference between the total FAS106 net periodic costs determined for a given year and the amount of such costs included in then-existing utility rates.

5. The provisions of FAS106 may require a company to record an OPEB asset in the normal course of business, without regard to any regulatory agreements or orders adopting a tracking mechanism:

    a. The proposed tracking mechanism would exclude from rate base for ratemaking purposes any future OPEB asset resulting from an actuarial study that resulted in "negative" net periodic costs.

    b. The proposed tracking mechanism would exclude, or not recognize, any "negative" net periodic costs for ratemaking purposes, instead setting the amount equal to "zero" (i.e., $0).

6. If the utility is allocated a portion of the FAS106 net periodic costs from an affiliated entity in the normal course of business and the tracking mechanism is approved by the Commission, the Company would be required to commit to funding 100% of the FAS106 net periodic costs for both MECO and the affiliate or to maintain segregated OPEB trust fund accounting for each entity in order to avoid any funding conflicts or issues that might arise In the future.

7. Any commitment by MECO to fund 100% of its FAS106 net periodic costs (as limited under item 3) will not be contingent on implementing a substantially similar tracking mechanism for each MECO affiliate.

Maui Electric Company, Ltd.
Employee Benefits - Allocation by Division
Final Settlement
$000

	Maui	Lanai	Molokai	MECO Consolidated
June 2007 Update	5,700.8	160.8	249.8	6,111.4
C-9 DSM Employee Adjustment	(78.5)			(78.5)
C-14 Employee Count Adjustment	(48.1)	(1.4)	(2.2)	(51.7)
C-16 Pension Asset Amortization Adjustment	(225.3)	(6.6)	(10.0)	(241.9)
Final Settlement	5,348.9	152.8	237.6	5,739.3

PAYROLL EXPENSE - AVERAGE EMPLOYEES

LINE NO.	DESCRIPTION	REFERENCE	MAUI	LANAI	MOLOKAI	TOTAL
	(A)	(B)	(C)	(D)	(E)	(F)
1	Average Headcount Adjustment:					
2	Production O&M	(a)	$ (112,819)	$ (42,274)	$ (1,018)	$ (156,111)
3	Transmission & Distribution O&M	(b)	(110,233)	(1,058)	(1,135)	(112,426)
4	Customer Accounts O&M	(c)	(68,671)	-	-	(68,671)
5	Customer Service O&M	(d)	(33,272)	-	-	(33,272)
6	Administrative & General O&M	(e)	(1,928)	-	-	(1,928)
7	**REVISED CONSUMER ADVOCATE AVERAGE**		**$ (326,922)**	**$ (43,332)**	**$ (2,153)**	**$ (372,407)**
8	**STAFFING ADJUSTMENT**					

Footnotes:

(a) Source: MECO T-11 Attachment 3(A) p. 1.
(b) Source: MECO T-11 Attachment 3(B) p. 1.
(c) Source: MECO T-11 Attachment 3(C) p. 1.
(d) Source: MECO T-11 Attachment 3(D) p. 1.
(e) Source: MECO T-11 Attachment 3(E) p. 2.

LABOR ADJUSTMENT - PRODUCTION O&M

LINE NO.	RA (A)	Division (B)	Average Staffing Calculations: Updated 2007 TY (C)	Actual 12/31/2006 (D)	Average (E)	Difference (F)	Adjustment Percentage Difference (G)	MECO Direct Labor Forecast (H)	Direct Labor O&M Adjustment (I)
1	PRODUCTION O&M								
2		MAUI							
3	MGA	Administrative	12	12	12.0	-	0.0%	$ 434,129	$ -
4	MGB	Maintenance - Kahului	11	10	10.5	(0.5)	-4.5%	657,264	(29,876)
5	MGC	Combined Cycle Maint	3	3	3.0	-	0.0%	209,012	-
6	MGD	Maintenance - Maalaea	21	21	21.0	-	0.0%	1,497,959	-
7	MGE	Electrical Maintenance	12	10	11.0	(1.0)	-8.3%	864,598	(72,050)
8	MGK	Operations - Kahului	21	22	21.5	0.5	2.4%	1,533,148	36,504
9	MGM	Operations - Maalaea	30	29	29.5	(0.5)	-1.7%	2,071,702	(34,528)
10		Total MAUI	110	107	108.5	(1.5)		$ 7,267,812	$ (99,950)
11		LANAI							
12	MDL	Lanai - Energy Delivery	3	3	3.0	-	0.0%	$ 36,450	$ -
13	MGA	Administrative	12	12	12.0	-	0.0%	19,286	-
14	MGE	Electrical Maintenance	12	10	11.0	(1.0)	-8.3%	10,821	(902)
15	MGL	Lanai Production	6	5	5.5	(0.5)	-8.3%	438,606	(36,551)
16		Total LANAI	33	30	31.5	(1.5)		$ 505,163	$ (37,452)
17		MOLOKAI							
18	MGA	Administrative	12	12	12.0	-	0.0%	$ 20,316	$ -
19	MGE	Electrical Maintenance	12	10	11.0	(1.0)	-8.3%	10,821	(902)
20	MGT	Molokai Production	7	7	7.0	-	0.0%	458,061	-
21		Total MOLOKAI	31	29	30.0	(1.0)		$ 489,198	$ (902)
22	TOTAL	MECO Production O&M	174 (a)	166 (a)	170.0	(4.0)		$ 8,262,173 (b)	$ (138,304)

			Maui	Lanai	Molokai	Total MECO
23	ADJUSTMENT RECAP:					
24	Total Production O&M Direct Labor Adjustment	(000's)	$ (99,950)	$ (37,452)	$ (902)	$ (138,304)
25	Add: Indirect On-Costs	(c)	12.9%	12.9%	12.9%	12.9%
26	Direct Labor Times On-Cost Percentage		(12,868)	(4,822)	(116)	(17,806)
27	Total Consumer Advocate Adjustment to Normalize for Average Staffing in the Production Department		$ (112,819)	$ (42,274)	$ (1,018)	$ (156,111)

Adjustments made to CA Exhibit CA-WP-101-C13, page 1:
MGD = 1 headcount ("HC") added to column D. Diesel Maintenance Mechanic started on 1/3/07.

Footnotes:

(a) Source: Staffing levels from MECO's response to CA-IR-112.

(b) Source: MECO T-5 response to CA-IR-1, Attachment 3.

(c)

Indirect costs:	Maui	Lanai	Molokai	Total Prod.
Direct $	$ 7,267,812	$ 505,162	$ 489,197	$ 8,262,171
Oncost $	935,942	65,306	62,490	1,063,738
Total Labor $	$ 8,203,754	$ 570,468	$ 551,687	$ 9,325,909
Oncost %				12.9%

Source: MECO-WP-101(F) & (H).

Reduction to O&M Labor Expense - Settlement

WITHOUT ON-COSTS	Maui	Lanai	Molokai	Total		
Production O&M	99,950	37,452	902	138,304		
Transmission& Distribution O&M	98,614	946	1,015	100,575		
Customer Accounts O&M	58,810			58,810		
Customer Service O&M	29,112			29,112		
Administrative & General O&M	1,699			1,699		
	288,185	38,398	1,917	328,500		
T&D Breakdown of $40,883						
MDK	25,014	2,088	0	27,102		27,102
MDR	13,781	0	0	13,781		13,781
Total	38,795	2,088	0	40,883		40,883
CA's T&D MDK Adj. (CA-WP-101-C13 Page 2)	28,352	2,367		30,719		

WITH ON-COSTS	Maui	Lanai	Molokai	Total		
Production O&M	112,818	42,274	1,018	156,110	1.128748	
Transmission& Distribution O&M	110,232	1,057	1,135	112,424	1.117816	
Customer Accounts O&M	68,670			68,670	1.167665	
Customer Service O&M	33,272			33,272	1.142899	
Administrative & General O&M	1,928			1,928	1.134956	
Total	326,921	43,331	2,153	372,405		
T&D Breakdown of $45,700						
MDK	27,961	2,334	0	30,295		30,295
MDR	15,405	0	0	15,405		15,405
Total	43,366	2,334	0	45,700		45,700
CA's T&D MDK Adj. (CA-WP-101-C13 Page 2)	28,352	2,367		30,719		

	Empl. Count	Labor Expenses $(000)	Empl. Count	Labor Expenses $(000)
Production O&M	(2.5)	($196)	(2.0)	$156
Transmission& Distribution O&M	(8.5)	($185)	(8.0)	$112
Customer Accounts O&M	(0.5)	($70)	(0.5)	$69
Customer Service O&M	0.0	($33)	0.0	$33
Administrative & General O&M	0.0	($5)	0.0	$2
Total	(11.5)	($489)	(10.5)	$372

MECO Proposed Adjustment to Consumer Advocate's Labor Expense Adjustment

	Maui	Lanai	Molokai	Total	
Production O&M RA "MGD"	$35,666	$0	$0	$35,666	N.1
On-Cost Percentage	0.129	0.129	0.129	0.129	N.1
Production O&M RA "MGD"	$40,258	$0	$0	$40,258	
T&D O&M RA "MDE"	$23,042	$290	$716	$24,048	N.2
On-Cost Percentage	0.118	0.118	0.118	0.118	N.2
T&D O&M RA "MDE"	$25,757	$324	$800	$26,881	
T&D O&M RA "MDK"	$28,352	$2,367	$0	$30,719	N.2
T&D O&M RA "MDR"	$86,449	$0	$0	$86,449	N.2
T&D O&M Total	$114,801	$2,367	$0	$117,168	N.2
On-Cost Percentage	0.118	0.118	0.118	0.118	
A&G O&M Ras "MDK" & "MDR"	$128,326	$2,646	$0	$130,972	
Customer Accts O&M RA "MDR"	$1,431	$0	$0	$1,431	N.3
On-Cost Percentage	0.168	0.168	0.168	0.168	N.3
Customer Accts O&M RA "MDR"	$1,671	$0	$0	$1,671	
A&G O&M RA "MDK"	$1,621	$0	$0	$1,621	N.4
A&G O&M RA "MDR"	$1,122	$0	$0	$1,122	N.4
A&G O&M Total	$2,743	$0	$0	$2,743	N.4
On-Cost Percentage	0.135	0.135	0.135	0.135	
A&G O&M Ras "MDK" & "MDR"	$3,113	$0	$0	$3,113	

N.1 CA-WP-101-C13, Page 1
N.2 CA-WP-101-C13, Page 2
N.3 CA-WP-101-C13, Page 3
N.4 CA-WP-101-C13, Page 6

LABOR ADJUSTMENT - TRANSMISSION & DISTRIBUTION O&M

LINE NO.	RA	Division	Average Staffing Calculations: Updated 2007 TY	Actual 12/31/2006	Average	Difference	Adjustment Percentage Difference	MECO Direct Labor Forecast	Direct Labor O&M Adjustment	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	
1	**TRANSMISSION & DISTRIBUTION**									
2		MAUI								
3	MCF	Field Service	7	6	6.5	(0.5)	-7.1%	$ 80,340	$ (5,739)	
4	MCR	Customer Operations	13	12	12.5	(0.5)	-3.8%	16,776	(645)	
5	MDC	Communications/Electronics	6	5	5.5	(0.5)	-8.3%	125,917	(10,493)	
6	MDE	Maintenance	10	10	10.0	-	0.0%	460,832	-	
7	MDK	Construction	37	29	33.0	(4.0)	-10.8%	262,254	(3,338)	Note 1
8	MDM	Meter	7	7	7 0	-	0.0%	418,412	-	
9	MDR	Operation	27	24	25.5	(1.5)	-5.6%	1,556,091	(72,668)	Note 2
10	MDS	Stores	5	5	5.0	-	0.0%	10,123	-	
11	MWI	Information Services	6	6	6.0	-	0.0%	1,547	-	
12	MWM	Mapping	1	1	1.0	-	0.0%	2,096	-	
13	MWP	Engineering Planning	18	17	17.5	(0.5)	-2.8%	23,447	(651)	
14	MWS	Engineering Staff	5	4	4.5	(0.5)	-10.0%	50,804	(5,080)	
15	MGA	Administrative	12	12	12.0	-	0.0%	19,480	-	
16		Total MAUI	154	138	146.0	(8.0)		$ 3,028,117	$ (98,615)	
17		LANAI								
18	MDC	Communications/Electronics	6	5	5.5	(0.5)	-8.3%	$ 8,004	$ (667)	
19	MDE	Maintenance	10	10	10.0	-	0.0%	5,794	-	
20	MDK	Construction	37	29	33.0	(4.0)	-10.8%	21,896	(279)	Note 3
21	MDL	Lanai	3	3	3.0	-	0.0%	44,360	-	
22	MDM	Meter	7	7	7.0	-	0.0%	3,252	-	
23	MGA	Administrative	12	12	12.0	-	0.0%	1,567	-	
24		Total LANAI	75	66	70.5	(4.5)		$ 84,873	$ (946)	
25		MOLOKAI								
26	MCT	Molokai Customer Service	3	3	3 0	-	0.0%	$ 5,329	$ -	
27	MDC	Communications/Electronics	6	5	5.5	(0.5)	-8.3%	12,188	(1,016)	
28	MDE	Maintenance	10	10	10.0	-	0.0%	14,312	-	
29	MDM	Meter	7	7	7.0	-	0.0%	3,658	-	
30	MDT	Molokai T&D	4	4	4.0	-	0.0%	113,874	-	
31	MGA	Administrative	12	12	12.0	-	0.0%	1,567	-	
32		Total MOLOKAI	42	41	41.5	(0.5)		$ 150,928	$ (1,016)	
33	**TOTAL MECO T&D O&M**		271	245	258.0	(13.0)		$ 3,263,918	$ (100,576)	
			(a)	(a)				(b)		

			Maui	Lanai	Molokai	Total MECO
34	ADJUSTMENT RECAP:					
35	Total T&D O&M Direct Labor Adjustment	(000's)	$ (98,615)	$ (946)	$ (1,016)	$ (100,576)
36	Add: Indirect On-Costs	(c)	11.8%	11.8%	11.8%	11.8%
37	Direct Labor Times On-Cost Percentage		(11,618)	(111)	(120)	(11,850)
38	Total Consumer Advocate Adjustment to Normalize for Average Staffing in the T&D Department		$ (110,233)	$ (1,058)	$ (1,135)	$ (112,426)

Adjustments made to CA Exhibit CA-WP-101-C13, page 2:
MDE = 1 headcount ("HC") added to column D. Environmental Specialist started on 1/15/07.
Note 1: $25,014 additional reduction reflected in MDK per CA's $45,700 adjustment.
Note 2: $13,781 additional reduction reflected in MDR per CA's $45,700 adjustment.
Note 3: $2,088 additional reduction reflected in MDK per CA's $45,700 adjustment.

Footnotes:
(a) Source: Staffing levels from MECO's response to CA-IR-112.
(b) Source: MECO T-6 response to CA-IR-1, Attachment 3.
(c) Indirect costs:

	Maui	Lanai	Molokai	Total T&D
Direct $	$ 3,028,117	$ 84,873	150928	$ 3,263,918
Oncost $	354,787	10,069	19687	384,543
Total Labor $	$ 3,382,904	$ 94,942	$ 170,615	$ 3,648,461
Oncost %				11.8%

Source: MECO-WP-101(F) & (H).

LABOR ADJUSTMENT - CUSTOMER ACCOUNTS

LINE NO.	RA	Division	Average Staffing Calculations: Updated 2007 TY	Actual 12/31/2006	Average	Difference	Adjustment Percentage Difference	MECO Direct Labor Forecast	Direct Labor O&M Adjustment
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
1	CUSTOMER ACCOUNTS								
2		NARUC A/C 901							
3		MAUI							
4	MSA	Admin & Home Service	4	4	4.0	-	0.0%	$ 17,590	$ -
5	MCA	Administrative	3	2	2.5	(0.5)	-16.7%	81,758	(13,626)
6		Total MAUI	7	6	6.5	(0.5)		99,348	(13,626)
7		Total A/C 901	7	6	6.5	(0.5)		$ 99,348	$ (13,626)
8		NARUC A/C 902							
9		MAUI							
10	MCF	Field Service	7	6	6.5	(0.5)	-7.1%	$ 25,539	$ (1,824)
11	MCM	Meter Reading	8	9	8.5	0.5	6.3%	342,911	21,432
12	MDR	Customer Operations	27	27	27.0	-	0.0%	25,754	-
13		Total MAUI	42	42	42.0	-		394,204	19,608
14		LANAI							
15	MDL	Lanai	3	3	3.0	-	0.0%	49,190	-
16		Total LANAI	3	3	3.0	-		49,190	-
17									
18		MOLOKAI							
19	MCT	Molokai Customer Service	3	3	3.0	-	0.0%	37,087	-
20		Total MOLOKAI	3	3	3.0	-		37,087	-
21		Total A/C 902	48	48	48.0	-		$ 480,481	$ 19,608
22		NARUC A/C 903							
23		MAUI							
24	MCA	Administrative	3	2	2.5	(0.5)	-16.7%	$ 116,579	$ (19,430)
25	MCF	Field Service	7	6	6.5	(0.5)	-7.1%	241,021	(17,216)
26	MCM	Meter Reading	8	9	8.5	0.5	6.3%	6,175	388
27	MCN	Energy Services	5	4	4.5	(0.5)	-10.0%	32,569	(3,257)
28	MCR	Customer Operations	13	12	12.5	(0.5)	-3.8%	657,154	(25,275)
29	MCZ	Forecasts	4	4	4.0	-	0.0%	56,141	-
30	MWM	Mapping	1	1	1.0	-	0.0%	3,981	-
31		Total MAUI	41	38	39.5	(1.5)		1,113,620	(64,792)
32		LANAI							
33	MDL	Lanai Energy Delivery	3	3	3.0	-	0.0%	2,250	-
34		Total LANAI	3	3	3.0	-		2,250	-
35		MOLOKAI							
36	MCT	Molokai Customer Service	3	3	3.0	-	0.0%	105,326	-
37	MDT	Molokai T&D	4	4	4.0	-	0.0%	139	-
38		Total MOLOKAI	7	7	7.0	-		105,465	-
39		Total A/C 903	51	48	49.5	(1.5)		$ 1,221,335	$ (64,792)
			(a)	(a)				(b)	
40	TOTAL MECO Customer Accounts							$ 1,801,164	$ (58,810)

LINE NO.			Maui	Lanai	Molokai	Total MECO
41	ADJUSTMENT RECAP:					
42	Total Customer Accounts O&M Direct Labor Adjustment	(000's)	$ (58,810)	$ -	$ -	$ (58,810)
43	Add: Indirect On-Costs	(c)	16.8%	16.8%	16.8%	16.8%
44	Direct Labor Times On-Cost Percentage		(9,860)	-	-	(9,860)
45	Total Consumer Advocate Adjustment to Normalize for Average Staffing in the Customer Accounts Department		$ (68,671)	$ -	$ -	$ (68,671)

Adjustments made to CA Exhibit CA-WP-101-C13, page 3:
MDR = Reflects CA's revised adjustment.

Footnotes:

(a) Source: Staffing levels from MECO's response to CA-IR-112.

(b) Source: MECO direct labor forecast from MECO-WP-101(F).

(c) Indirect costs:

	Maui	Lanai	Molokai	Total Cust. Accts.
Direct $	$ 1,607,172	$ 51,440	$ 142,552	$ 1,801,164
Oncost $	273,728	5,951	22,313	301,992
Total Labor $	$ 1,880,900	$ 57,391	$ 164,865	$ 2,103,156
Oncost %				16.8%

Source: MECO-WP-101(F) & (H).

LABOR ADJUSTMENT - CUSTOMER SERVICE

LINE NO.	RA	Division	Average Staffing Calculations: Updated 2007 TY	Actual 12/31/2006	Average	Difference	Adjustment Percentage Difference	MECO Direct Labor Forecast	Direct Labor O&M Adjustment
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
1	**CUSTOMER SERVICE**								
2		MAUI							
3	MCA	Administrative	3	2	2.5	(0.5)	-16.7%	$ 53,553	$ (8,926)
4	MSA	Admin & Home Service	4	4	4.0	-	0.0%	10,656	-
5	MSC	Customer Services	1	1	1.0	-	0.0%	54,814	-
6	MSS	Safety	4	4	4.0	-	0.0%	13,012	-
7	MCN	Energy Services	5	4	4.5	(0.5)	-10.0%	201,863	(20,186)
8	MCZ	Forecasts	4	4	4.0	-	0.0%	48,704	-
9		Total MAUI	21	19	20.0	(1.0)		382,602	(29,112)
10		LANAI							
11	MSC	Customer Services	1	1	1.0	-	0.0%	$ 251	$ -
12		Total LANAI	1	1	1.0	-		251	-
13		MOLOKAI							
14	MSC	Customer Services	1	1	1.0	-	0.0%	$ 251	$ -
15		Total MOLOKAI	1	1	1.0	-		251	-
16	*TOTAL MECO Customer Service*		23	21	22.0	-1.0		$ 383,104	$ (29,112)
			(a)	(a)				(b)	

			Maui	Lanai	Molokai	Total MECO
17	ADJUSTMENT RECAP:					
18	Total Customer Service O&M Direct Labor Adjustment	(000's)	$ (29,112)	$ -	$ -	$ (29,112)
19	Add: Indirect On-Costs	(c)	14.3%	14.3%	14.3%	14.3%
20	Direct Labor Times On-Cost Percentage		(4,160)	-	-	(4,160)
21	Total Consumer Advocate Adjustment to Normalize for Average Staffing in the Customer Service Department		$ (33,272)	$ -	$ -	$ (33,272)

Footnotes:

(a) Source: Staffing levels from MECO's response to CA-IR-112.

(b) Source: MECO direct labor forecast from MECO-WP-101(F).

(c) Indirect costs:

	Maui	Lanai	Molokai	Total Cust. Svc.
Direct $	$ 382,601	$ 251	$ 251	$ 383,103
Oncost $	54,673	36	36	54,745
Total Labor $	$ 437,274	$ 287	$ 287	$ 437,848
Oncost %				14.3%

Source: MECO-WP-101(F) & (H).

LABOR ADJUSTMENT - ADMINISTRATIVE & GENERAL NARUC A/C 920

LINE NO.	RA	Division	Average Staffing Calculations: Updated 2007 TY	Actual 12/31/2006	Average	Difference	Adjustment Percentage Difference	MECO Direct Labor Forecast	Direct Labor O&M Adjustment
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
1	ADMINISTRATIVE & GENERAL								
2		NARUC A/C 920							
3		MAUI							
4	MSA	Admin & Home Service	4	4	4.0	-	0.0%	$ 188,664	$ -
5	MSC	Consumer Services	1	1	1.0	-	0.0%	1,849	-
6	MSP	Personnel	2	2	2.0	-	0.0%	68,004	-
7	MSS	Safety	4	4	4.0	-	0.0%	63,249	-
8		Total MAUI	11	11	11.0	-		321,766	-
9		**Administration**	11	11	11.0	-		$ 321,766	$ -
10		MAUI							
11	MCF	Field Service	7	6	6.5	(0.5)	-7.1%	$ 3,367	$ (241)
12	MCR	Customer Operations	13	12	12.5	(0.5)	-3.8%	31,388	(1,207)
13		Total MAUI	20	18	19.0	(1.0)		34,755	(1,448)
14		MOLOKAI							
15	MCT	Molokai Customer Service	3	3	3.0	-	0.0%	$ 11,524	$ -
16		Total MOLOKAI	3	3	3.0	-		11,524	-
17		**Customer Service**	23	21	22.0	(1.0)		$ 46,279	$ (1,448)
18		MAUI							
19	MWI	Information Services	6	6	6.0	-	0.0%	$ 327,600	$ -
20		Total MAUI	6	6	6.0	-		327,600	-
21		**Distribution**	6	6	6.0	-		$ 327,600	$ -
22		MAUI							
23	MWL	Engineering Land	2	2	2.0	-	0.0%	$ 78,613	$ -
24	MWS	Engineering Staff	5	4	4.5	(0.5)	-10.0%	200	(20)
25		Total MAUI	7	6	6.5	(0.5)		78,813	(20)
26		**Engineering**	7	6	6.5	(0.5)		$ 78,813	$ (20)
27		MAUI							
28	MAA	Administrative	3	3	3.0	-	0.0%	$ 198,053	$ -
29	MAB	Budgets	4	4	4.0	-	0.0%	230,543	-
30	MAG	General Accounting	3	3	3.0	-	0.0%	173,469	-
31	MAP	Purchasing	1	1	1.0	-	0.0%	57,492	-
32	MAX	Tax and Plant Accounting	4	4	4.0	-	0.0%	220,065	-
33		Total MAUI	15	15	15.0	-		879,622	-
34		**General Accounting**	15	15	15.0	-		$ 879,622	$ -
35		MAUI							
36	M9P	President's Office	1	1	1.0	-	0.0%	$ 192,985	$ -
37		Total MAUI	1	1	1.0	-		192,985	-
38		**President**	1	1	1.0	-		$ 192,985	$ -
39		**Total A/C 920**	63	60	61.5	(1.5)		$ 1,847,065	$ (1,468)

LABOR ADJUSTMENT - ADMINISTRATIVE & GENERAL NARUC A/C 925 - 932

LINE NO.	RA	Division	Average Staffing Calculations: Updated 2007 TY	Actual 12/31/2006	Average	Difference	Adjustment Percentage Difference	MECO Direct Labor Forecast	Direct Labor O&M Adjustment
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
40		NARUC A/C 925							
41		MAUI							
42	MSA	Admin & Home Service	4	4	4.0	-	0.0%	$ 24,817	$ -
43	MSP	Personnel	2	2	2.0	-	0.0%	737	-
44	MSS	Safety	4	4	4.0	-	0.0%	176,211	-
45	MDK	Construction	37	37	37.0	-	0.0%	14,996	-
46	MDR	Customer Operations	27	27	27.0	-	0.0%	20,196	-
47		Total MAUI	74	74	74.0	-		236,957	-
48		TOTAL A/C 925	74	74	74.0	-		$ 236,957	$ -
49		NARUC A/C 926000							
50		MAUI							
51	MSA	Admin & Home Service	4	4	4.0	-	0.0%	$ 1,834	$ -
52	MSP	Personnel	2	2	2.0	-	0.0%	68,653	-
53		Total MAUI	6	6	6.0	-		70,487	-
54		TOTAL A/C 926000	6	6	6.0	-		$ 70,487	$ -
55		NARUC A/C 9302							
56		MAUI							
57	MSA	Admin & Home Service	4	4	4.0	-	0.0%	$ 10,090	$ -
58	MSP	Personnel	2	2	2.0	-	0.0%	515	-
59	MCN	Energy Services	5	4	4.5	(0.5)	-10.0%	2,309	(231)
60	MCZ	Forecasts	4	4	4.0	-	0.0%	3,599	-
61	MGA	Administrative	12	12	12.0	-	0.0%	151	-
62		Total MAUI	27	26	26.5	(0.5)		16,664	(231)
		MOLOKAI							
63	MGT	Molokai Production	7	7	7.0	-	0.0%	$ 533	$ -
64		Total MOLOKAI	7	7	7.0	-		533	-
65		TOTAL A/C 9302	27	26	26.5	(0.5)		$ 17,197	$ (231)
66		NARUC A/C 932							
67		MOLOKAI							
68	MDT	Molokai T&D	4	4	4.0	-	0.0%	$ 9,802	$ -
69		Total MOLOKAI	4	4	4.0	-		9,802	-
70		TOTAL A/C 9302	4	4	4.0	-		$ 9,802	$ -
71	Total A&G O&M		174	170	172.0	(2.0)		$ 2,181,508	$ (1,699)
			(a)	(a)				(b)	

				Maui	Lanai	Molokai	Total MECO
72	ADJUSTMENT RECAP:						
73	A&G Direct Labor Adjustment	(000's)		$ (1,699)	$ -	$ -	$ (1,699)
74	Add: Indirect On-Costs	(c)		13.5%	13.5%	13.5%	13.5%
75	Direct Labor Times On-Cost Percentage			(229)	-	-	(229)
76	Total Consumer Advocate Adjustment to Normalize for Average A&G Staffing			$ (1,928)	$ -	$ -	$ (1,928)

Adjustments made to CA Exhibit CA-WP-101-C13, page 6:
MDK and MDR = Reflects CA's revised adjustment.

Footnotes:

(a) Source: Staffing levels from MECO's response to CA-IR-112.
(b) Source: MECO direct labor forecast from MECO-WP-101(F).
(c) Indirect costs:

	Maui	Lanai	Molokai	Total A&G
Direct $	$ 2,159,649	$ -	$ 21,859	$ 2,181,508
Oncost $	291,323	-	3,085	294,408
Total Labor $	$ 2,450,972	$ -	$ 24,944	$ 2,475,916
Oncost %				13.5%

Source: MECO-WP-101(F) & (H).

Maui Electric Company, Limited
Docket No. 2006-0387

EMPLOYEE BENEFITS

Consumer Advocate Employee Benefits Adjustment (N.1)	($56,392)
Consumer Advocate Number of Employees Adjustment (N.1)	12
Average Employee Benefits Per Employee	($4,699)
MECO Number of Employees Adjustment (N.2)	11
MECO Employee Benefits Adjustment	($51,693)

N.1 Exhibit CA-101, Schedule C-14
N.2 Employee Adjustment - 0.5 (MGD), 0.5 (MDE)

Maui Electric Company, Ltd.
Employee Benefits - Allocation by Division
Final Settlement

	Maui	Lanai	Molokai	MECO Consolidated
12/31/06:				
Allocation basis:				
Employee Count 12/31/07 per TY forecast	312.0	9.0	14.0	335.0
Company proposed adjustments	(10.5)	(0.5)	-	(11.0)
Company Proposed Average Employee Count	301.5	8.5	14.0	324.0
Allocation percent	93.056%	2.623%	4.321%	100.000%
Amounts to be allocated:				
Employee Benefits (N.2)	(48,103)	(1,356)	(2,234)	(51,693)

N.1 MECO T-11, Attachment 3(F), page 1 of 1

MAUI ELECTRIC CO., LTD.
Calculation of Domestic Production Activities Deduction (DPAD)
2007

	TY 2007 Proposed Rates		Allocated To Generation	
Electric Sales Revenue	370,039 0		278,129	(C) See note (1).
Other Operating Revenue	1,756 0			
	371,795 0		278,129	
Power production expense-Fuel	(180,465 0)		(180,465)	
Power production expense-Purchased Power	(33,982 0)	(A)		
Power production expense-Production	(20,975 0)		(20,975)	
Transmission expense	(2,122 0)			
Distribution expense	(5,970 0)			
Customer accounts expense	(3,017.0)		(2,522)	Allocation based on note (2) below.
Customer service	(1,329.0)		(1,111)	Allocation based on note (2) below.
A & G Operations expense	(13,362 0)		(11,169)	Allocation based on note (2) below.
Allowance for Uncollectable Accounts	(223 0)		(186)	Allocation based on note (2) below.
Total O&M expense	(261,445 0)		(216,428)	
Depreciation expense	(28,012.0)		0	
Taxes other than income taxes	(34,303.0)		(25,809)	
Income taxes (includes amort of state ITC)	(14,460.0)		0	
Miscellaneous	(221.0)		(185)	Allocation based on note (2) below
Other operating expense	(76,996.0)		(25,994)	
Net utility operating income	33,354 0			
Tax Adjustments.				
Interest	(9,870 2)		(4,416)	Allocation based on note (5) below
Interest allocated from HEI	-		0	Allocation based on note (5) below.
Estimated Current State ITC on Production Assets			153	See note (4) below.
Estimated State Tax Depreciation on Production Assets			(12,354)	See note (3) below.
State Pretax Income			19,090	(F)
Less: State Tax Deduction			(1,148)	(F) * 6 0150376% state tax rate
State Taxable Income			17,942	
Add· Federal State Tax Depreciation Difference			(264)	See note (3) below.
Estimated taxable income for generation activity for 2006			17,678	
Estimated Domestic Production Activities Deduction (6%)			1,061	
Estimated Federal Tax Effect at 35%			371	

NOTES:

(1) Calculation of Revenue Attributable to Purchased Power:

Power Production Expense-Purchased Power	33,982	(A)
Divided by: Revenue Tax Gross Up (1-.08885)	91.1150%	
Purchased Power Revenue Grossed Up	37,296	(B)
Electric Sales Revenue Net of Purchased Power Revenues		
Electric Sales Revenue	370,039	(C)
Less: Electric Sales Revenues Related to Purchased Power	(37,296)	(B)
Electric Sales Revenue, Net of Purchased Power Revenue	332,743	(D)
Production Sales Net of Purchased Power Revenues		
Total Production Sales	315,425	See MECO T-13 Attachment 1, p 2
Less: Production Sales Revenues Related to Purchased Power	(37,296)	(B)
Production Sales Revenue, Net of Purchased Power Revenue	278,129	(E)

(2) Allocation based on current cost of service workpapers as adjusted for purchased power revenues.

Production Sales / Electric Sales Revenue	278,129/ 332,743	(E) / (D)
Production Cost of Service Percentage Calculated	83.5868%	

(3)

2007 State Tax Depreciation of Production Assets	(12,354)
2007 Federal Tax Depreciation of Production Assets	(12,090)
Federal State Depreciation Adjustment	264

(4)

2007 Production Tax Additions	3,831 2
State ITC Rate	4%
2007 State ITC Related to Production Assets	153.3

(5) Compute average assets:

	2006	2005
Tax NBV of Production Assets	142,760,158	92,655,797
Tax NBV of All Depreciable Assets	290,428,967	235,691,296
Interest Allocation Based on Rate Base %		
(Note: 2007 NBV not available, used ratios determined in the actual 2006 income tax return)		
Average Tax NBV of Production Assets	117,707,977	
Average Tax NBV of All Depreciable Assets	263,060,132	
Interest Allocation Based on Average Tax NBV of Assets%	44.75%	

MAUI ELECTRIC COMPANY, LTD.
Revenues Attributable to Production
Test Year 2007
($ Thousands)

	TY 2007 Proposed Rates		References
Total Production Sales			
Maui Division	297,875.6		MECO-WP-1802, p. 65
Lanai Division	9,658.2		MECO-WP-1802, p. 154
Molokai Division	11,716.0		MECO-WP-1802, p. 243
Total Production Sales	319,249.8	(A)	CA-IR-376, p. 3
Total Revenue			
Maui Division	350,632.5		MECO-WP-1802, p. 65
Lanai Division	10,597.3		MECO-WP-1802, p. 154
Molokai Division	13,297.3		MECO-WP-1802, p. 243
Total Revenue	374,527.1	(B)	
Percentage of Production Sales to Total Revenue	85.241%		(A) / (B)
Proposed Revenues	370,039.0		
Production Sales	315,424.1		

MAUI ELECTRIC CO., LTD.
Taxes Other Than Income
Test Year 2007
($ Thousands)

	TY 2007	References
PSC Tax Calculation		
Electric Sales Revenue	278,129	MECO T-13 Attachment 1, p. 1
Less: Bad Debt Deduction	(186)	See Note 1 below
PSC Tax Base	277,943	
PSC Tax Rate	5.885%	MECO-WP-1301, p. 1
PSC Taxes	16,357	
PUC Fee Calculation		
Electric Sales Revenue	278,129	MECO T-13 Attachment 1, p. 1
Less: Bad Debt Deduction	(186)	See Note 1 below
PUC Fee Base	277,943	
PUC Fees Rate	0.5%	MECO-WP-1301, p. 1
PUC Fees	1,390	
Franchise Royalty Tax Calculation		
Electric Sales Revenue	278,129	MECO T-13 Attachment 1, p. 1
Less: Bad Debt Deduction	(186)	See Note 1 below
Franchise Royalty Tax Base	277,943	
Franchise Royalty Tax Rate	2.5%	MECO-WP-1301, p. 1
Franchise Royalty Taxes	6,949	
Payroll Taxes		
Total Payroll Taxes	1,333	MECO T-13 Attachment 1, p. 4
Allocation Factor	83.5868%	See Note 2 on MECO T-13 Attachment 1, p. 1
Payroll Taxes allocated to Production	1,114	
Total Taxes Other Than Income	25,809	MECO T-13 Attachment 1, p. 1

NOTE 1: Calculation of Bad Debt Deduction		
Total Allowance for Uncollectible Accounts	223	Revised Revenue Req. Run dated 10/31/07
Production Cost of Service Percentage	83.5868%	See Note 2 on MECO T-13 Attachment 1, p. 1
Bad Debt allocated to Production	186	

Maui Electric Company, Ltd.
Payroll Taxes Charged to Operations
For Test Year 2007
(In Thousands)

	Summary of Payroll Taxes Charged to Operations	Maui	Lanai	Molokai	UPDATED* 2007 Test Year
	Allocation	90.96%	4.04%	5.00%	100.00%
1	FICA	1,185	53	65	1,303
2	Federal Unemployment Taxes	11	1	1	13
3	State Unemployment Taxes	15	1	1	17
4	Total Payroll Taxes Charged to Operations	1,211	55	67	1,333

	Allocation of Payroll Taxes Based on Labor Dollars Charged	Test Year Payroll Taxes
5	Capital	343
6	Operations	1,333
7	Others	273
	Total Payroll Taxes	1,949

	Breakdown of Payroll Taxes	Total Payroll Taxes	Calculated Percentages	Payroll Taxes Charged to Operations
8	FICA	1,905	97.74%	1,303
9	FUTA	19	0.97%	13
10	SUTA	25	1.28%	17
11	Total Payroll Taxes	1,949	100.0%	1,333

* Note: This schedule has been revised to reflect payroll reductions in MECO's first settlement proposal as of 11/1/07.

MAUI ELECTRIC COMPANY, LTD.
DPAD SUPPORT WORKPAPER - Allocation by Island
Test Year 2007
($ Thousands)

	MAUI	LANAI	MOLOKAI	TOTAL
Estimated DPAD Adjustment	973	40	47	1,061
Estimated Federal Tax @ 35%	341	14	17	371

Note: Consistent with other allocated tax balances, allocation was based on relative plant balances @ 12/31/06, as follows:

	Plant Balance	% of Total
Maui	704,983,000	91.75%
Lanai	29,297,000	3.80%
Molokai	34,181,000	4.45%
TOTAL MECO	768,461,000	100.00%

Maui Electric Company, Ltd.
Payroll Taxes Charged to Operations
For Test Year 2007
(In Thousands)

	Summary of Payroll Taxes Charged to Operations	Maui	Lanai	Molokai	FINAL 2007 Test Year
	Allocation	90.96%	4.04%	5.00%	100.00%
1	FICA	1,174	52	65	1,291
2	Federal Unemployment Taxes	11	0	1	12
3	State Unemployment Taxes	14	1	1	16
4	Total Payroll Taxes Charged to Operations	1,199	53	67	1,319

	Allocation of Payroll Taxes Based on Labor Dollars Charged	Test Year Payroll *Taxes*
5	Capital	343
6	Operations	1,319
7	Others	290
	Total Payroll Taxes	1,951

	Breakdown of Payroll Taxes	Total Payroll Taxes	Calculated Percentages	Payroll Taxes Charged to Operations
8	FICA	1,909	97.85%	1,291
9	FUTA	18	0.92%	12
10	SUTA	24	1.23%	16
11	Total Payroll Taxes	1,951	100.0%	1,319

NOTE: This schedule has been updated to reflect settlement agreements with the CA regarding overall employee count reduction and DSM employees included in the June Update.

Maui Electric Company, Ltd.
Payroll Taxes Charged to Operations
For Test Year 2007

FICA

	Pay Date	Est Gross Pay	Effective Rate	Total FICA	Rounded (000's)
1	1/14/2007	983,825	7.56%	74,337	
2	1/28/2007	983,825	7.56%	74,337	
3	2/11/2007	1,013,276	7.56%	76,562	
4	2/25/2007	1,021,308	7.56%	77,169	
5	3/11/2007	979,072	7.56%	73,978	
6	3/25/2007	967,553	7.56%	73,107	
7	4/8/2007	966,358	7.59%	73,356	
8	4/22/2007	965,461	7.59%	73,288	
9	5/6/2007	962,285	7.59%	73,047	
10	5/20/2007	958,050	7.59%	72,725	
11	6/3/2007	977,825	7.59%	74,226	
12	6/17/2007	1,050,334	7.59%	79,730	
13	7/1/2007	1,045,016	7.59%	79,327	
14	7/15/2007	975,886	7.49%	73,108	
15	7/29/2007	975,886	7.49%	73,108	
16	8/12/2007	1,018,866	7.49%	76,328	
17	8/26/2007	1,026,029	7.49%	76,865	
18	9/9/2007	1,009,830	7.49%	75,651	
19	9/23/2007	1,000,831	7.49%	74,977	
20	10/7/2007	1,021,556	6.60%	67,460	
21	10/21/2007	1,042,282	6.60%	68,829	
22	11/4/2007	1,046,046	6.60%	69,077	
23	11/18/2007	1,055,454	6.60%	69,698	
24	12/2/2007	1,049,191	6.60%	69,285	
25	12/16/2007	1,011,612	6.60%	66,803	
26	12/30/2007	1,011,612	6.60%	66,803	
27	1/13/2008	73,171	7.56%	5,529	
28		26,192,440		1,908,710	1,909

2005 Form 941

Pay Date	FICA	Gross Pay	Eff Rate
Quarter 1	501,952	6,643,171	7.56%
Quarter 2	415,485	5,473,427	7.59%
Quarter 3	480,167	6,409,529	7.49%
Quarter 4	374,180	5,666,270	6.60%

Federal Unemployment Taxes

	Rate	$ Max	No. Employees at Year End	FUTA Tax	
29	0.8%	7,000	324 **	18,144	18

State Unemployment Taxes

	Rate	$ Max	No. Employees at Year End	SUTA Tax	
30	0.21%	35,300	324 **	24,018	24 *

31 Total Payroll Taxes (Line 28 + Line 29 + Line 30) 1,951

* Revised SUTA maximum base and rates for June update.
** EE count reflects settlement with CA as of 11/26/07; EE count reduced by 11 (from June update).

Maui Electric Company, Ltd.
Payroll Tax Allocation Worksheet
Test Year 2007

(In Thousands)

	Settlement				Settlement	Update	Direct
	Allocation of Payroll Taxes Based on Forecasted Labor $						
Category	Forecasted Labor $	Alloc Adj	Forecasted Labr $ Adj	Alloc %	Allocated Payroll Tax	Allocated Payroll Tax	Allocated Payroll Tax
Capital	4,043		4,043	17.56%	343	342	351
Billable	69		69	0.30%	6	6	6
O & M	15,561		15,561	67.59%	1,319	1,362	1,378
Other	3,349		3,349	14.55%	284	266	290
	0	0	0	0.00%	0	0	0
Clearing (NPW and Vacation)	3,171	(3,171)	0	0.00%	0	0	0
Total	28,193	(3,171)	23,022	100.00%	1,951	1,977	2,025

MECO T-13
ATTACHMENT 2
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FINAL SETTLEMENT

JUNE 2007 UPDATE
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Maui Electric Company, Ltd.
Forecasted Labor Costs
Test Year 2007

Category	Ind	FY07	Direct Category Totals	Per MECO T-8 Reclassify DSM Labor	JUNE UPDATE	Reverse DSM Labor	subtotal	Agreed Labor Reduction	AGREED SETTLEMENT
Billable	BE	14,846							
Billable	BT	54,416	69,262		69,262		69,262		69,262
Capital	NI	3,514,526							
Capital	NR	528,444	4,042,970		4,042,970		4,042,970		4,042,970
Clearing	NC	3,170,902	3,170,902		3,170,902		3,170,902		3,170,902
O&M	NE	15,785,496							
O&M	NS	103,604	15,889,100	201,850	16,090,950	(201,850)	15,889,100	(328,500)	15,560,600
Other	NA	1,585							
Other	ND	3,329,362							
Other	NN	7,455							
Other	NP	10,304	3,348,706	(201,850)	3,146,856	201,850	3,348,706		3,348,706
		26,520,940	26,520,940	0	26,520,940	0	26,520,940	(328,500)	26,192,440

Total Payroll reduction	(328,500)
Pay periods in 2007	26
Adjustment to estimated Gross Pay	(12,635)

Maui Electric Company, Ltd.
Accumulated Deferred Income Taxes
Specific Items Only

Description/Activity	Direct Testimony Estimate 12/31/06	Direct Testimony Estimate 12/31/07	Direct Testimony Estimate Average	June 2007 T-13 Update 12/31/06	June 2007 T-13 Update 12/31/07	June 2007 T-13 Update Average	Source: Direct	Source: MECO T-13 Update
Federal ADIT								
28318 Pensn Cst	$ (1,703,675)	(448,911)	(1,076,293)	$ (1,717,450)	$ (397,425)	$ (1,057,438)		Att 1, p. 11
28318 Pensn Cst (nonqual)	32,010	35,458	49,739	(599)	(414)	(507)		Att 1, p. 11
	$ (1,671,665)	(413,453)	(1,026,554)	$ (1,718,049)	$ (397,839)	$ (1,057,944)		
State ADIT								
28358 Pensn Cst	$ (311,535)	(82,093)	(196,814)	$ (314,048)	$ (72,672)	$ (193,360)		Att 1, p. 12
28358 Pensn Cst (nonqual)	5,853	6,483	6,168	(110)	(76)	(93)		Att 1, p. 12
	$ (305,682)	(75,610)	$ (190,646)	$ (314,158)	$ (72,748)	$ (193,453)		
Total	$ (1,977,347)	(489,063)	$ (1,233,205)	$ (2,032,207)	$ (470,587)	$ (1,251,397)		
Federal ADIT								
28323 Cap Int	3,271,242	3,123,137	3,197,190	3,237,902	3,077,085	3,157,494		
TCI in CWIP	66,267	10,950	38,609	0	0	0		
State ADIT								
Cap Int	616,751	592,843	604,797	610,655	679,474	645,065		
TCI in CWIP	12,117	2,002	7,060	0	0	0		
Total	$ 3,966,377	$ 3,728,932	$ 3,847,655	$ 3,848,557	$ 3,756,559	$ 3,802,558		
Federal ADIT								
28404 Emission Fees Accrued	$ 107,610	$ 174,894	$ 141,252	$ 164,664	$ 331,476	$ 248,070		
State ADIT								
28454 Emission Fees Accrued	19,676	31,979	25,828	30,109	60,612	45,361		
Total	$ 127,286	$ 206,873	$ 167,080	$ 194,773	$ 392,088	$ 293,431		
Federal ADIT								
28340 IRP/DSM Costs	$ (280,617)	$ (280,617)	$ (280,617)	$ (373,233)	$ (373,233)	$ (373,233)		
State ADIT								
28381 IRP/DSM Costs	(51,313)	(51,313)	(51,313)	(68,249)	(68,249)	$ (68,249)		
Total	$ (331,930)	$ (331,930)	$ (331,930)	$ (441,482)	$ (441,482)	$ (441,482)		

EXHIBIT I

MECO T-13
ATTACHMENT 3

FINAL SETTLEMENT

Maui Electric Company, Ltd.
Accumulated Deferred Income Taxes
Specific Items Only

Activity/Description	Direct Testimony Estimate 12/31/06	Direct Testimony Estimate 12/31/07	Direct Testimony Estimate Average	June 2007 T-13 Update 12/31/06	June 2007 T-13 Update 12/31/07	June 2007 T-13 Update Average	Source: Direct testimony MECO-WP-1305	Source: MECO T-13 Update Attachment 1
Federal ADIT								
28318 Pensn Cst	$ (1,703,675)	(448,911)	(1,076,293)	$ (1,717,450)	$ (397,425)	$ (1,057,438)	page 3	page 11
28318 Pensn Cst (nonqual)	32,010	35,458	49,739	(599)	(414)	(507)	page 3	page 11
	$ (1,671,665)	(413,453)	(1,026,554)	$ (1,718,049)	$ (397,839)	$ (1,057,944)		
State ADIT								
28358 Pensn Cst	$ (311,535)	(82,093)	(196,814)	$ (314,048)	$ (72,672)	$ (193,360)	page 6	page 12
28358 Pensn Cst (nonqual)	5,853	6,483	6,168	(110)	(76)	(93)	page 6	page 12
	$ (305,682)	(75,610)	$ (190,646)	$ (314,158)	$ (72,748)	$ (193,453)		
Total	$ (1,977,347)	(469,063)	$ (1,233,205)	$ (2,032,207)	$ (470,567)	$ (1,251,397)		
Federal ADIT								
AFUDC in CWIP	129,829	129,829	129,829	1,015,303	801,688	908,496	page 3	page 11
State ADIT								
AFUDC in CWIP	23,740	23,740	23,740	185,655	146,594	166,125	page 6	page 12
Total	$ 153,569	$ 153,569	$ 153,569	$ 1,200,958	$ 948,282	$ 1,074,620		
Federal ADIT								
28323 Cap Int	3,271,242	3,123,137	3,197,190	3,237,902	3,077,085	3,157,494	page 3	page 11
TCI in CWIP	66,267	10,950	38,609	-	-	-	page 3	page 11
State ADIT								
28363 Cap Int	616,751	592,843	604,797	610,655	579,474	595,065	page 6	page 12
TCI in CWIP	12,117	2,002	7,060	-	-	-	page 6	page 12
Total	$ 3,966,377	$ 3,728,932	$ 3,847,655	$ 3,848,557	$ 3,656,559	$ 3,752,558		
Federal ADIT								
Reg Asset - AFUDC Eq Grossup	-	-	-	444,618	349,356	396,987	page 3	page 11
State ADIT								
Reg Asset - AFUDC Eq Grossup	-	-	-	81,301	63,882	72,592	page 6	page 12
Total	$ -	$ -	$ -	$ 525,919	$ 413,238	$ 469,579		
Federal ADIT								
28404 Emission Fees Accrued	$ 107,610	$ 174,894	$ 141,252	$ 164,664	$ 331,476	$ 248,070	page 3	page 11
State ADIT								
28454 Emission Fees Accrued	19,676	31,979	25,828	30,109	60,612	45,361	page 6	page 12
Total	$ 127,286	$ 206,873	$ 167,080	$ 194,773	$ 392,088	$ 293,431		
Federal ADIT								
28340 IRP/DSM Costs	$ (280,617)	$ (280,617)	$ (280,617)	$ (373,233)	$ (373,233)	$ (373,233)	page 3	page 11
State ADIT								
28381 IRP/DSM Costs	(51,313)	(51,313)	(51,313)	(68,249)	(68,249)	$ (68,249)	page 6	page 12
Total	$ (331,930)	$ (331,930)	$ (331,930)	$ (441,482)	$ (441,482)	$ (441,482)		

Maui Electric Company, Ltd.
Working Cash Study
O&M Non-Labor Payment Lag

Source: Per Supporting Worksheets

	Test Year Expense ($000's)	% of Total	Total Payment Lag Days	Weighted Average
	Note A		June 2007 Update MECO T-15, p.28.	
Pension Expense[1]		0%		days
OPEB Expense[2]	$787	3%	84	2 days
			MECO-WP-1507, p. 24-26	
Emission Fees[3]	$405	1%	306	4 days
EPRI Dues[4]	$222	1%	22	days
Other Non-Labor O&M[5]	$27,855	95%	32	30 days
	$29,269	100%		
O&M Non-Labor Payment Lag				**37 days**

NOTE: Totals may not add exactly due to rounding.

Note A

[1] Pension expense estimate based on updated 2007 Pension Accrual of $4,013k (per June 2007 Update MECO T-10) x 72% (based on 2006 % of Employee Benefits charged to O&M expense). For purposes of settlement, the Parties agree to exclude pension expense from the calculation of the O&M non-labor payment lag days and from the working cash calculation.

[2] OPEB expense estimate based on updated 2007 OPEB expense of $1,093k (per June 2007 Updated MECO T-10) x 72% (based on 2006 % of Employee Benefits charged to O&M expense).

[3] Emission Fees per MECO T-5.

[4] EPRI Dues per June 2007 Update MECO T-9.

[5] Other Non-Labor O&M = Total O&M Non-Labor expense of $32,158k, less other items noted above.

Maui Electric Company, Ltd.

Composite Embedded Cost of Capital
Test Year 2007 Average
($ Thousands)

		(A)	(B) = (A)/Total(A)	(C)	(D) = (B)*(C)
		Capitalization			
	WP Series Reference	Amount	Percent of Total	Earnings Requirement	Weighted Earnings Requirements
Short-Term Debt	WP-1702	$ 4,750	1.27%	5.00%	0.06%
Long-Term Debt	WP-1703	150,585	40.15%	6.11%	2.45%
Hybrid Securities	WP-1704	9,192	2.45%	7.47%	0.18%
Preferred Stock	WP-1705	4,693	1.25%	8.34%	0.10%
Common Equity	WP-1706	205,882	54.89%	10.70%	5.87%
Total Capitalization		$ 375,101	100.00%		8.67%
Estimated 2007 Test Year Composite Cost of Capital					**8.67%**

Totals may not add exactly due to rounding.

EXHIBIT 2

DOCKET NO. 2006-0387
MAUI ELECTRIC COMPANY, LIMITED 2007 TEST YEAR RATE CASE

AGREEMENTS ON RATE DESIGN BETWEEN
MAUI ELECTRIC COMPANY, LIMITED AND THE CONSUMER ADVOCATE

COST OF SERVICE/REVENUE ALLOCATION/RATE DESIGN

1. Cost of Service Study - A cost of service study is a tool used to estimate the cost responsibility of the different rate classes served by MECO for ratemaking purposes. The Company prepared two types of cost of service studies for this proceeding, one based on embedded or accounting costs, and the other was based on marginal costs. Although both studies reflected the costs of providing service, the procedure and emphasis of each of these two studies were different. An embedded cost of service study (or simply "cost of service study") is a process used to categorize and allocate the total utility costs of providing service (the utility's total revenue requirements) to the various rate classes in order to determine each class's estimated cost responsibility. In contrast, a marginal cost study determines the change in the utility's costs of providing service due to a unit change in kilowatts ("kW"), kilowatthours ("kWh"), or number of customers served by the utility (MECO T-18, pages 1-2).

   Development of MECO's embedded cost of service study for this proceeding involved three steps. First, the functionalization process categorized each of the costs and rate base items into the major operating functions: production, transmission and distribution. Second, the classification process classified each of the functionalized costs and rate base items into each of three costs components: energy-related, demand-related and customer-related. Third, each of the three costs components were allocated to the different rate classes by allocation factors (MECO T-18, pages 5-9). MECO provided its embedded cost of service study in direct testimony based on a cost allocation methodology previously approved by the Commission (MECO T-18, pages 11-12).

   In its direct testimony, the Consumer Advocate stated that MECO's general procedures for its embedded cost of service study are widely accepted and, with a few exceptions, are reasonable for a utility with MECO's service characteristics (CA-T-5, page 8). The Consumer Advocate also concurred with the Company's methodology for allocating the test year production and transmission demand costs (CA-T-5, page 11).

   However, the Consumer Advocate expressed two concerns with MECO's cost of service methodology. First, the Consumer Advocate asserted that because the distribution network of poles, lines and transformers do not vary directly with the number of customers being served, these costs should be classified as entirely demand-related, as opposed to partially customer-related as classified by MECO. Second, the Consumer Advocate maintained that some production O&M costs vary with kWh output and therefore should be treated as energy-related costs. In contrast, MECO had treated all non-fuel production O&M costs as demand-related. The Consumer Advocate contended that its recommended changes to classifying and allocating the respective costs are reasonable and should be considered by the Commission. The Consumer Advocate also recommended that the Company conduct a study to determine the mix of demand/energy production O&M cost drivers in support of its next rate case filing and embedded cost of service study (CA-T-5, pages 9, 11-12).

The Consumer Advocate did not propose any changes to the Company's marginal cost study.

As HECO and the Consumer Advocate agreed in Docket No. 2006-0386 (HECO 2007 test year rate case), for settlement purposes in this rate case:

a) The Parties concur that agreement on a cost of service methodology is not a requirement to settle this rate case since the proposed rates that are based on the agreed upon test year revenue requirements are not based directly upon the results of the cost of service study as noted in paragraph 2 below. The agreements on revenue allocation and rate design presented below are reasonable given the results of both MECO's and the Consumer Advocate's proposed cost of service methodologies;

b) MECO agrees in its next rate case to present a cost of service study utilizing the same distribution classification methodology as it used in this case, as well as a cost of service scenario that classifies all distribution network costs (poles, conduits, lines, and transformers investment and expenses) as demand-related. MECO can present other cost of service scenarios, if desired, and make whatever recommendations it chooses regarding interpretation and utilization of cost of service evidence; and

c) MECO agrees to conduct studies designed to isolate the demand (fixed) versus energy (variable) elements of its non-fuel production O&M expenses for use in the next MECO rate case, to be included in all of MECO's cost of service scenarios.

2. <u>Inter-Class Allocation of Revenue Increase</u> – In its direct testimony, MECO proposed to assign the revenue increase in the same percentage to each division (Maui, Lanai and Molokai) and to each rate schedule within each division (MECO T-18, page 5) because the allocation of the revenue increase according to cost of service would have resulted in excessively large increases for customers on Lanai and Molokai. Therefore, to mitigate the hardship on these customers, the Company proposed an equal percentage increase for each division (MECO T-1, pages 21-22).

The Consumer Advocate stated that because cost of service results can change significantly from one test period to another due to shifts in load conditions, expense levels or methodology changes, cost of service results should only be used as a guide and other factors must also be considered in developing rates that are intended to recover the test year revenue requirement (CA-T-5, page 36). The Consumer Advocate concurred that customer impacts should be considered in developing the proposed rates and thus agreed with the Company's proposal to assign the same percentage increase to each division and to each rate schedule within each division. In supporting MECO's proposal, the Consumer Advocate noted that an equal percentage rate increase will produce gradual movement toward indicated cost of service under either the MECO or Consumer Advocate's recommended embedded cost of service allocation methodologies (CA-T-5, page 38).

3. Intra-Class Rate Design

Schedule R

Schedule R service applies to residential lighting, heating, cooking, air conditioning and power in a single family dwelling unit metered and billed separately by the Company. The Company proposed an inclining block rate design (with lower than average rate increases for customers with kWh usage in the lowest tier, no more than approximately the class average rate increase for customers with kWh usage in the middle tier, and above average increases for customers with kWh usage in the highest tier), no changes to customer charges, and a provision for customers in the LIHEAP program to be charged only at the lowest price tier of the non-fuel energy charges. The merits of an inclining block rate design include mitigation of rate impact on the smallest users of the system, pricing signals that help to encourage conservation, and assignment of a greater share of the cost increase to the larger users. The provision for customers in the LIHEAP program would be the same as proposed in the most recent HECO and HELCO rate cases (MECO T-18, pages 15-16).

As it had done in Docket Nos. 2006-0386 (HECO 2007 test year rate case) and 05-0315 (HELCO 2006 test year rate case), the Consumer Advocate agreed with the Company's residential inclining block rate design proposals, stating that inclining block rate structures can strengthen the incentive for residential customers to invest in conservation, improve affordability of electric service for customers with low usage levels and mitigate rate increase impacts on lower income consumers who elect to limit their usage to the lower tiers of the rate. The Consumer Advocate also stated that the proposal for LIHEAP customers is an important element of the inclining block rate proposal that should be approved by the Commission. (CA-T-5, pages 43-44.)

Commercial Rate Schedules – Customer Charges

Schedule G is for general power service applicable to small commercial customers with loads not exceeding 5,000 kWh per month or loads less than or equal to 25 kW. MECO proposed Schedule G customer charges of $25 per month for single phase service and $40 per month for three phase service at Maui Division (MECO T-18, page 18), $30 per month for single phase service and $45 per month for three phase service at Lanai Division (MECO T-18, page 49), and $23 per month for single phase service and $34 per month for three phase service at Molokai Division (MECO T-18, page 80). The proposed customer charges were designed to recover approximately the same share of the Schedule G customer cost of service as in the final rate design in the MECO test year 1999 rate case (MECO T-18, pages 18-19,49, and 80). The Consumer Advocate stated that these proposals were generally consistent with its cost of service results and did not exceed customer charges found acceptable in settlement with HECO in Docket No. 04-0113 and should therefore be approved by the Commission (CA-T-5, page 45).

Schedule J is for general power service applicable to commercial customers with loads greater than 5,000 kWh per month or greater than 25 kW, but less than 200 kW. MECO proposed Schedule J customer charges of $50 per month for single-phase service and $65 per month for three-phase service at Maui Division (MECO T-18, page 20), $45 per month for single-phase service and $60 per month for three-phase service at Lanai Division (MECO T-18, page 51), and $32 per month for single-phase service and $42 per month for three-phase service at Molokai Division (MECO T-18, page 81). The proposed customer charges were designed to recover approximately the same share of the Schedule J customer cost of service study results as in the final rate design for the MECO test year 1999 rate case (MECO T-18, pages 21, 51-52, and 82). The Consumer Advocate agreed with the proposed Lanai and Molokai charges for Schedule J, but proposed to limit the Maui Division increase to $10 such that the Maui Division proposed Schedule J customer charges would be $45 per month for single-phase service and $60 per month for three-phase service. The Consumer Advocate's position was that the proposed customer charges for Maui Division were unacceptable when combined with the proposed demand charge increases, which would result in unacceptably large percentage bill increases to the smallest, low load factor Schedule J customers. (CA-T-5, pages 45-46.) For the purpose of reaching a settlement on rate design issues in this proceeding, MECO accepts the Consumer Advocate's proposal for Schedule J customer charges at the Maui Division.

Schedule H is an end-use rate that applies to specific commercial electric loads, including commercial cooking, heating, air conditioning, and refrigeration loads. MECO proposed Schedule H customer charges of $40 per month for single-phase service and $55 per month for three-phase service at the Maui and Lanai Divisions (increases of $12.00 to $13.00 per month), while leaving the Schedule H customer charges at Molokai Division unchanged (MECO T-18, pages 23, 54, and 85). The proposed customer charges are designed to recover less than the same share of the Schedule H customer cost of service, similar to the final rate design in the MECO test year 1999 rate case, in order to moderate the increase in the customer charge rates.

In its direct testimony, the Consumer Advocate stated that considering the higher unit customer costs to serve Schedule H (as shown on MECO-1810, page 1 and CA-501, page 1), the Company's proposal to close Schedule H to new customers and the Consumer Advocate's proposal to limit Schedule H demand charge increases (discussed below), the Company's proposed customer charge increases for Schedule H were reasonable (CA-T-5, page 46).

Schedule P is for general power service applicable to commercial or industrial customers with large power loads of at least 200 kW. MECO proposed to increase the Schedule P customer charge from $225 to $375 for the Maui Division (MECO T-18, page 25), with no changes in the Schedule P customer charge for the Lanai and Molokai Divisions (MECO T-18, pages 56, 86). The proposed customer charge increase for the Maui Division is designed to recover less than the same share of the Schedule P customer cost of service as in the final rate design in the MECO 1999 test year rate case in order to moderate the increase in the customer charge (MECO T-18, page 26).

The Consumer Advocate recommended limiting the Maui Division Schedule P customer charge to $300 per month at this time to moderate the impact of rate changes upon the smallest Schedule P customers (CA-T-5, page 46). For purposes of reaching a settlement on rate design issues, MECO accepts the Consumer Advocate's proposal.

Commercial Rate Schedules – Demand Charges
MECO proposed the following increases to demand charges in Schedules J, H, and P (MECO T-18, pages 20, 23, 25; 51, 54, 56; 81, 85, and 86-87).

MECO PROPOSED DEMAND CHARGES
(PER KW-BILLED)

	Maui		Lanai		Molokai	
Schedule	Existing	Proposed	Existing	Proposed	Existing	Proposed
J	$5.75	$12.00	$5.75	$9.00	$4.75	$11.00
H	$4.50	$7.00	$4.50	$8.00	$6.00	$10.00
P (0-500 kW)	$8.50	$18.00	$8.50	$22.00	$5.00	$11.00
P (≥ 501 kW)	$8.00	$17.00	$8.00	$20.00	$4.85	$10.00

The proposed demand charges were designed to recover a greater proportion of the demand costs through the demand charges rather than through energy charges, in order to align rates closer to their cost of service (MECO T-18, pages 21, 24, and 26).

In its direct testimony, the Consumer Advocate expressed concern about the impact of the proposed demand charge increases on lower load factor customers and recommended limiting demand charge increases to no more than 30% above the demand charges presently in effect so as to more gradually increase rates towards the indicated demand cost of service (CA-T-5, pages 48-49). MECO is willing to limit the Schedule J and Schedule H demand charge increases to no more than 30% above the demand charges currently in effect and reduce its proposed demand charges for Schedule P by $2.00 per kW. For purposes of settlement, the Parties agree on the following demand charges.

DEMAND CHARGES MECO-CONSUMER ADVOCATE AGREEMENT (PER KW-BILLED)						
	Maui		Lanai		Molokai	
Schedule	Existing	Proposed	Existing	Proposed	Existing	Proposed
J	$5.75	$7.50	$5.75	$7.50	$4.75	$6.15
H	$4.50	$5.85	$4.50	$5.85	$6.00	$7.80
P (0-500 kW)	$8.50	$16.00	$8.50	$20.00	$5.00	$9.00
P (≥ 501 kW)	$8.00	$15.00	$8.00	$18.00	$4.85	$8.00

Commercial Rate Schedules – Energy Charges

In its direct testimony, MECO proposed to recover in Energy Charges the part of the class revenue requirement that is not provided by the proposed customer and demand charges, net of all other adjustments. The Consumer Advocate agreed that this was a reasonable approach, subject to its proposed constraints regarding the need to gradually increase customer and demand charges. (MECO T-18, pages 21, 24, 26; 52, 55, 57; 83, 85, and 87-88 and CA-T-5, page 49.)

Commercial Rate Schedules – Power Factor Adjustment

Large commercial customers with demands of 200 kW or more are subject to power factor adjustments based on their measured use of var-hours. Under current MECO rates, power factor adjustments are credits for power factors above 85% and surcharges for power factors below 85% (the breakpoint is 90% at Molokai Division). In its direct testimony, the Consumer Advocate recommended that MECO provide in its next general rate filing either: (a) Company-specific studies to support the Company's proposed power factor rate credits; or (b) an explanation as to how the results of analysis performed for HECO and HELCO can be applied to MECO's costs and power factor adjustment (CA-T-5, page 55). MECO agrees in its next rate filing to complete a MECO power factor study in support of revised power factor rate elements or explain how the results of a HECO or HELCO study would apply to MECO for such purposes.

Commercial Rate Schedules – Schedule H

As HECO and HELCO have proposed in Docket Nos. 2006-0386 and 05-0315, MECO also proposed to close its only end-used based Schedule H tariff to new customers as part of a plan to transition Schedule H customers to Schedules J and P (MECO T-18, pages 23, 54, and 85-86). MECO is moving towards clearer distinctions between its commercial customers, and the number of Schedule H customers is relatively small compared to the number of Schedule G, Schedule J, and Schedule P customers. If any Schedule H customers remain at the time of the next MECO rate filing, the Consumer Advocate recommends that MECO be required to submit evidence of the continuing need for Schedule H or a plan for orderly migration of remaining Schedule H customers to other rate schedules (CA-T-5, pages 53-54). For purposes of settlement, the Company agrees to eliminate Schedule H in its rate design proposal in the next MECO general rate case.

4. Other Revisions to Rate Schedules/Rule Changes

MECO also proposed the following rate schedule/rule changes:

- Increase Schedule G minimum charges to maintain the price differential between the customer charge and minimum charges that are in existing MECO rates (MECO T-18, pages 19, 49, and 80).
- Modify the determination of billing demand in Schedule J for simplicity and ease of understanding. The proposed average demand ratchet is the same as the current demand ratchet in Schedule P, making the demand ratchet provisions for all of the demand rate schedules the same and consistent (MECO T-18, pages 22, 53, and 84.)
- Modify the Schedule J Availability Clause (MECO T-18, pages 21-22,52-53, and 83):
  - to better define and clarify the load size that qualifies under Schedule J for ease of understanding and application;
  - to make a clearer distinction between the medium-sized customers served under Schedule J, and the large power customers served under the Schedule P;
  - to apply Schedule J to a more homogenous group of medium-size commercial and industrial customers with similar load levels and characteristics, essential for designing more efficient pricing and costing, and facilitate aligning rates closer to cost of service; and
  - to support rate and revenue stability and continuity
- Modify the Schedule P Availability Clause to exclude all customers that would be served under Schedule J (MECO-108, page 13; MECO-109, page 12; MECO-110, page 12).
- Close Schedule U to new customers because there are no customers on this rate (MECO T-18, pages 28, 59, and 91).
- Close Schedule N at Molokai Division to new accounts (Schedule N service is only available on Molokai) (MECO T-18, page 88).
- Modify the terms and conditions of Rider T to allow customers to do emergency maintenance on their equipment without considering its impact on the customers' on-peak billing demand (MECO T-18, pages 30, 60, and 92).
- Terminate the electric vehicle charging rates because there are no customers and no formal PUC approval to implement these riders (MECO T-18, pages 44-45, 75-76, and 107-108).
- Offer four new time-of-use rate options in this case, Schedule TOU-R – Residential Time-of-Use Service, Schedule TOU-G - - Small Commercial Time-of-Use Service, Schedule TOU-J - - Commercial Time-of-Use Service, and Schedule TOU-P - - Large Power Time-of-Use Service, in order to extend to all customers the opportunity to choose time-of-use rates, to establish a consistency in rate design for all time-of-use rate options, and to manage participation and

collect data for future time-of-use rate designs, consistent with the proposals made in the HECO rate cases Docket No. 04-0113 and Docket No. 2006-0386 and in the HELCO rate case Docket No. 05-0315 (MECO T-18, pages 34-35, 65-66, and 97-98).

- Modify the returned check charge, field collection charge, and service establishment charge based on the costs of the various activities (MECO T-18, pages 108-110).

In its direct testimony, the Consumer Advocate did not object to these proposals. In particular, the Consumer Advocate stated the following in its direct testimony:

- The Consumer Advocate did not object to MECO's proposed changes to the commercial rate availability provisions and the Schedule J demand ratchet, which were comparable to tariff changes proposed by HECO in Docket No. 04-0113 (CA-T-5, page 50).
- The Consumer Advocate supported the Company's TOU rate proposal subject to MECO adjusting the final rate levels within the proposed TOU rates to maintain parity with the final sales rate levels ultimately approved by the Commission for the related basic sales rate schedules (CA-T-5, page 53).
- The Consumer Advocate stated that the proposed returned check charge, field collection charge and service establishment charge, were acceptable and were supported by detailed time and expense cost studies prepared by MECO and compared reasonably to price changes recently agreed upon by the Consumer Advocate for implementation by HELCO and HECO in Docket Nos. 05-0315 and 2006-0386 (CA-T-5, page 57).

Thus, the Consumer Advocate and MECO are in agreement regarding these other tariff and rule change matters.

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing JOINT PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW OF MAUI ELECTRIC COMPANY, LIMITED AND THE CONSUMER ADVOCATE and EXHIBITS 1-2, together with this CERTIFICATE OF SERVICE, as indicated below by hand delivery and/or by mailing a copy by United States mail, postage prepaid, to the following:

Hand Delivery	U.S. Mail	
6 copies		Catherine Awakuni, Executive Director Department of Commerce and Consumer Affairs Division of Consumer Advocacy 335 Merchant Street, Room 326 Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, July 17, 2009.

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